Treatment of Depression During Pregnancy and the Postpartum Period

Appendixes

Appendix A. Search Strategies

CINAHL Plus with Full Text 1941-December 2012

- S1 MH Pregnancy+
- S2 "pregnan*"
- S3 MH Postnatal Period+
- S4 (MH "Affective Disorders+")
- S5 MH Seasonal Affective Disorder
- S6 MH Depression+ OR MH Depression, Postpartum
- S7 MH Serotonin Uptake Inhibitors+
- S8 "selective serotonin reuptake inhibitor"
- S9 "ssri"
- S10 MH Citalopram OR citalopram
- S11 "escitalopram"
- S12 MH Fluoxetine OR fluoxetine OR MH Olanzapine-Fluoxetine
- S13 MH Fluvoxamine Maleate OR fluvoxamine
- S14 MH Sertraline Hydrochloride OR sertraline
- S15 MH Paroxetine OR paroxetine
- S16 "celexa"
- S17 "lexapro"
- S18 "prozac"
- S19 "luvox"
- S20 "zoloft"
- S21 "paxil"
- S22 MH Desvenlafaxine Succinate OR desvenlafaxine
- S23 MH Mirtazapine OR mirtazapine
- S24 "pristiq"
- S25 MH Venlafaxine OR effexor
- S26 "noradrenergic and specific serotonergic reuptake inhibitor"
- S27 (MH "Duloxetine Hydrochloride") OR "duloxetine"
- S28 "cymbalta"
- S29 (MH "Norepinephrine") OR "norepinephrine"
- S30 MH Dopamine Uptake Inhibitors OR dopamine reuptake inhibitor
- S31 MH Bupropion OR bupropion
- S32 "wellbutrin"
- S33 MH Nefazodone OR nefazodone
- S34 "serzone"
- S35 (MH "Antidepressive Agents+") OR (MH "Antidepressive Agents, Tricyclic+")
- S36 (MH "Amitriptyline") OR "amitriptyline"
- S37 (MH "Imipramine") OR "imipramine"
- S38 (MH "Desipramine") OR "desipramine"
- S39 (MH "Nortriptyline") OR "nortriptyline"
- S40 MH Teratogens OR teratogenicity
- S41 S1 OR S2 OR S3
- S42 S4 OR S5 OR S6

S43 S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39

S44 S41 AND S42 AND S43

S45 S40 AND S43

S46 S44 OR S45

S47 S44 OR S45

EBM Reviews - Cochrane Central Register of Controlled Trials December 2012

- 1 exp Pregnancy/
- 2 pregnan\$.mp.
- 3 Perinatal Care/
- 4 Postnatal Care/
- 5 Peripartum Period/
- 6 exp Postpartum Period/

7 mood disorders/ or depressive disorder/ or depression, postpartum/ or depressive disorder, major/ or depressive disorder, treatment-resistant/ or dysthymic disorder/ or seasonal affective disorder/ 8 Depression/

9 (depressi\$ or dysthymi\$ or "mood disorder\$" or "seasonal affective disorder" or sad).mp.

10 or / 7 - 9

- 11 10 and (de or dh or dt or pc or th).fs.
- 12 Serotonin Uptake Inhibitors/
- 13 (selective serotonin reuptake inhibitor\$ or ssri).mp.
- 14 (citalopram or escitalopram or fluoxetine or fluoxamine or sertraline or paroxetine).mp.
- 15 (celexa or lexapro or prozac or luvox or zoloft or paxil).mp.
- 16 serotonin norepinephrine reuptake inhibitor.mp.
- 17 (desvenlafaxine or mirtazapine).mp.
- 18 (pristig or effexor).mp.
- 19 (noradrenergic and specific serotonergic reuptake inhibitor).mp.
- 20 remeron.mp.
- 21 (selective serotonin and norepinephrine reuptake inhibitor).mp.
- 22 ssnri.mp.
- 23 (duloxetine or cymbalta).mp.
- 24 (norepinephrine and dopamine reuptake inhibitor).mp.
- 25 ndri.mp.
- 26 (bupropion or wellbutrin).mp.
- 27 (nefazodone or serzone).mp.
- 28 (olanzapine adj1 fluoxetine).mp.
- 29 exp Antidepressive Agents/
- 30 Antidepressive Agents, Tricyclic/
- 31 (amitriptyline or imipramine).mp.
- 32 desipramine.mp. or Desipramine/
- 33 nortriptyline.mp. or Nortriptyline/
- 34 or/12-33
- 35 exp Prenatal Injuries/

- 36 exp Maternal Exposure/
- 37 exp Pregnancy Complications/
- 38 exp Pregnancy Outcome/
- 39 exp Fetal Development/
- 40 or/35-39
- 41 exp Infant/
- 42 exp Infant Mortality/
- 43 exp child/ or exp child, preschool/
- 44 (infant\$ or child\$ or pediatri\$).mp.
- 45 or/41-44
- 46 exp Prenatal Care/
- 47 exp Preconception Care/
- 48 Abnormalities, Drug-Induced/ or Prenatal Exposure Delayed Effects/
- 49 teratogen\$.mp.
- 50 or/1-6
- 51 (pregnan\$ or perinatal or postpartum).mp.
- 52 50 or 51
- 53 46 or 47 or 52
- 54 48 or 49
- 55 11 and 34 and 53
- 56 34 and 40
- 57 34 and 54
- 58 34 and 45 and 52
- 59 or/55-58

EBM Reviews - Cochrane Database of Systematic Reviews 2005 to November 2012

- 1. (depressi\$ or bipolar\$ or dysthymi\$ or cyclotymi\$ or "mood disorder\$" or "seasonal affective disorder" or sad).mp.
- 2. (selective serotonin reuptake inhibitor\$ or ssri).mp.
- 3. (citalopram or escitalopram or fluoxetine or fluoxamine or sertraline or paroxetine).mp.
- 4. (celexa or lexapro or prozac or luvox or zoloft or paxil).mp.
- 5. serotonin norepinephrine reuptake inhibitor.mp.
- 6. (desvenlafaxine or mirtazapine).mp.
- 7. (pristiq or effexor).mp.
- 8. (noradrenergic and specific serotonergic reuptake inhibitor).mp.
- 9. mirtazapine.mp.
- 10. remeron.mp.
- 11. (selective serotonin and norepinephrine reuptake inhibitor).mp.
- 12. ssnri.mp.
- 13. (duloxetine or cymbalta).mp.
- 14. (norepinephrine and dopamine reuptake inhibitor).mp.
- 15. ndri.mp.
- 16. (bupropion or wellbutrin).mp.
- 17. (nefazodone or serzone).mp.
- 18. (olanzapine adj1 fluoxetine).mp.

- 19. antidepressant\$.mp.
- 20. (amitriptyline or imipramine or desipramine or nortriptyline).mp.
- 21. (pregnan\$ or prenatal\$ or postnatal\$ or peripartum or postpartum).mp.
- 22. or/2-20
- 23. 1 and 21 and 22
- 24. limit 23 to full systematic reviews

Ovid MEDLINE and Ovid OLDMEDLINE 1946 to November Week 3 2012

- 1. exp Pregnancy/
- 2. pregnan\$.mp.
- 3. Perinatal Care/
- 4. Postnatal Care/
- 5. Peripartum Period/
- 6. exp Postpartum Period/
- 7. mood disorders/ or depressive disorder/ or depression, postpartum/ or depressive disorder, major/ or depressive disorder, treatment-resistant/ or dysthymic disorder/ or seasonal affective disorder/
- 8. Depression/
- 9. (depressi\$ or dysthymi\$ or "mood disorder\$" or "seasonal affective disorder" or sad).mp.
- 10. or/7-9
- 11. 10 and (de or dh or dt or pc or th).fs.
- 12. Serotonin Uptake Inhibitors/
- 13. (selective serotonin reuptake inhibitor\$ or ssri).mp.
- 14. (citalogram or escitalogram or fluoxetine or fluoxamine or sertraline or paroxetine).mp.
- 15. (celexa or lexapro or prozac or luvox or zoloft or paxil).mp.
- 16. serotonin norepinephrine reuptake inhibitor.mp.
- 17. (desvenlafaxine or mirtazapine).mp.
- 18. (pristiq or effexor).mp.
- 19. (noradrenergic and specific serotonergic reuptake inhibitor).mp.
- 20. remeron.mp.
- 21. (selective serotonin and norepinephrine reuptake inhibitor).mp.
- 22. ssnri.mp.
- 23. (duloxetine or cymbalta).mp.
- 24. (norepinephrine and dopamine reuptake inhibitor).mp.
- 25. ndri.mp.
- 26. (bupropion or wellbutrin).mp.
- 27. (nefazodone or serzone).mp.
- 28. (olanzapine adj1 fluoxetine).mp.
- 29. exp Antidepressive Agents/
- 30. Antidepressive Agents, Tricyclic/
- 31. (amitriptyline or imipramine).mp.
- 32. desipramine.mp. or Desipramine/
- 33. nortriptyline.mp. or Nortriptyline/
- 34. or/12-33
- 35. exp Prenatal Injuries/
- 36. exp Maternal Exposure/

- 37. exp Pregnancy Complications/
- 38. exp Pregnancy Outcome/
- 39. exp Fetal Development/
- 40. or/35-39
- 41. exp Infant/
- 42. exp Infant Mortality/
- 43. exp child/ or exp child, preschool/
- 44. (infant\$ or child\$ or pediatri\$).mp.
- 45. or/41-44
- 46. exp Prenatal Care/
- 47. exp Preconception Care/
- 48. Abnormalities, Drug-Induced/ or Prenatal Exposure Delayed Effects/
- 49. teratogen\$.mp.
- 50. or/1-6
- 51. (pregnan\$ or perinatal or postpartum).mp.
- 52. 50 or 51
- 53. 46 or 47 or 52
- 54. 48 or 49
- 55. 11 and 34 and 53
- 56. 34 and 40
- 57 34 and 54
- 58. 34 and 45 and 52
- 59. or/55-58
- 60. limit 59 to humans
- 61. limit 60 to english language
- 62. limit 60 to abstracts
- 63. 61 or 62

PsychInfo 1806 to December Week 2 2012

- 1. exp Pregnancy/
- 2. pregnan\$.mp.
- 3. mood disorders/ or depressive disorder/ or depression, postpartum/ or depressive disorder, major/ or depressive disorder, treatment-resistant/ or dysthymic disorder/ or seasonal affective disorder/
- 4. Depression/
- 5. (depressi\$ or dysthymi\$ or "mood disorder\$" or "seasonal affective disorder" or sad).mp.
- 6. (selective serotonin reuptake inhibitor\$ or ssri).mp.
- 7. (citalopram or escitalopram or fluoxetine or fluoxamine or sertraline or paroxetine).mp.
- 8. (celexa or lexapro or prozac or luvox or zoloft or paxil).mp.
- 9. serotonin norepinephrine reuptake inhibitor.mp.
- 10. (desvenlafaxine or mirtazapine).mp.
- 11. (pristiq or effexor).mp.
- 12. (noradrenergic and specific serotonergic reuptake inhibitor).mp.
- 13. mirtazapine.mp.
- 14. remeron.mp.

- 15. (selective serotonin and norepinephrine reuptake inhibitor).mp.
- 16. ssnri.mp.
- 17. (duloxetine or cymbalta).mp.
- 18. (norepinephrine and dopamine reuptake inhibitor).mp.
- 19. ndri.mp.
- 20. (bupropion or wellbutrin).mp.
- 21. (nefazodone or serzone).mp.
- 22. (olanzapine adj1 fluoxetine).mp.
- 23. (amitriptyline or imipramine or desipramine or nortriptyline).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
- 24. exp Tricyclic Antidepressant Drugs/ or exp Antidepressant Drugs/
- 25. exp Pregnancy Outcome/
- 26. (infant\$ or child\$ or pediatri\$).mp.
- 27. 1 or 2
- 28. or/3-5
- 29. or/6-24
- 30. 25 and 26
- 31. 27 and 28 and 29
- 32. 29 and 30
- 33. 31 or 32

Sciverse Scopus 1974 to December 2012

(TITLE-ABS-KEY((pregnan*) AND ("mood disorder*" OR "affective disorder*" OR "depressive disorder" OR depression OR "seasonal affective disorder" OR "dysthymic disorder")) OR (TITLE-ABS-KEY(teratogen*)) AND ((TITLE-ABS-KEY(antidepressant* OR antidepressive agent* OR "selective serotonin reuptake inhibitor*" OR "ssri" OR citalopram OR escitalopram OR fluoxetine OR fluvoxamine OR sertraline OR paroxetine OR celexa OR lexapro OR prozac OR luvox OR zoloft OR paxil OR desvenlafaxine OR mirtazapine OR pristiq OR effexor OR "noradrenergic and specific serotonergic reuptake inhibitor" OR "selective serotonin and norepinephrine reuptake inhibitor" OR "ssnri" OR "norepinephrine and dopamine reuptake inhibitor" OR bupropion OR wellbutrin OR nefazodone OR serzone OR amitriptyline OR imipramine OR desipramine OR nortriptyline OR remeron OR olanzapine))

Appendix B. Included Studies

Observational studies

- 1. Alwan S, Reefhuis J, Botto LD, et al. Maternal use of bupropion and risk for congenital heart defects. American Journal of Obstetrics & Gynecology. 2010 Jul;203(1):52.e1-6. PMID: 20417496.
- 2. Alwan S, Reefhuis J, Rasmussen SA, et al. Use of selective serotonin-reuptake inhibitors in pregnancy and the risk of birth defects. New England Journal of Medicine. 2007 Jun 28;356(26):2684-92. PMID: 17596602.
- 3. Andrade SE, McPhillips H, Loren D, et al. Antidepressant medication use and risk of persistent pulmonary hypertension of the newborn. Pharmacoepidemiology & Drug Safety. 2009 Mar;18(3):246-52. PMID: 19148882.
- 4. Bakker MK, De Walle HEK, Wilffert B, et al. Fluoxetine and infantile hypertrophic pylorus stenosis: a signal from a birth defects-drug exposure surveillance study. Pharmacoepidemiology & Drug Safety. 2010 Aug;19(8):808-13. PMID: 20572024.
- 5. Bakker MK, Kerstjens-Frederikse WS, Buys CHCM, et al. First-trimester use of paroxetine and congenital heart defects: a population-based case-control study. Birth Defects Research. 2010 Feb;88(2):94-100. PMID: 19937603.
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- 8. Berle JO, Steen VM, Aamo TO, et al. Breastfeeding during maternal antidepressant treatment with serotonin reuptake inhibitors: infant exposure, clinical symptoms, and cytochrome p450 genotypes. Journal of Clinical Psychiatry. 2004 Sep;65(9):1228-34. PMID: 15367050.

- 9. Bogen DL, Hanusa BH, Moses-Kolko E, et al. Are maternal depression or symptom severity associated with breastfeeding intention or outcomes? Journal of Clinical Psychiatry. 2010 Aug;71(8):1069-78. PMID: 20584521.
- 10. Boucher N, Bairam A, Beaulac-Baillargeon L. A new look at the neonate's clinical presentation after in utero exposure to antidepressants in late pregnancy. Journal of Clinical Psychopharmacology. 2008 Jun;28(3):334-9. PMID: 18480693.
- 11. Bracken MB, Holford TR. Exposure to prescribed drugs in pregnancy and association with congenital malformations. Obstetrics and Gynecology. 1981;58(3):336-44.
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 Apr;142(4):402-8. PMID: 12712058.
- 13. Chambers CD, Hernandez-Diaz S, Van Marter LJ, et al. Selective serotonin-reuptake inhibitors and risk of persistent pulmonary hypertension of the newborn. New England Journal of Medicine. 2006 Feb 9;354(6):579-87. PMID: 16467545.
- 14. Chambers CD, Johnson KA, Dick LM, et al. Birth outcomes in pregnant women taking fluoxetine. New England Journal of Medicine. 1996 Oct 3;335(14):1010-5. PMID: 8793924.
- 15. Chun-Fai-Chan B, Koren G, Fayez I, et al. Pregnancy outcome of women exposed to bupropion during pregnancy: a prospective comparative study. American Journal of Obstetrics & Gynecology. 2005 Mar;192(3):932-6. PMID: 15746694.
- 16. Cole JA, Ephross SA, Cosmatos IS, et al. Paroxetine in the first trimester and the prevalence of congenital malformations. Pharmacoepidemiology & Drug Safety. 2007 Oct;16(10):1075-85. PMID: 17729379.
- 17. Cole JA, Modell JG, Haight BR, et al. Bupropion in pregnancy and the prevalence of congenital malformations. Pharmacoepidemiology & Drug Safety. 2007 May;16(5):474-84. PMID: 16897811.

- 18. Colvin L, Slack-Smith L, Stanley FJ, et al. Linking a pharmaceutical claims database with a birth defects registry to investigate birth defect rates of suspected teratogens. Pharmacoepidemiology and Drug Safety. 2010;19(11):1137-50.
- 19. Colvin L, Slack-Smith L, Stanley FJ, et al. Dispensing patterns and pregnancy outcomes for women dispensed selective serotonin reuptake inhibitors in pregnancy. [Erratum appears in Birth Defects Res A Clin Mol Teratol. 2011 Apr;91(4):268]. Birth Defects Research. 2011 Mar;91(3):142-52. PMID: 21381184.
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- 22. Croen LA, Grether JK, Yoshida CK, et al. Antidepressant use during pregnancy and childhood autism spectrum disorders. Archives of General Psychiatry. 2011 Nov;68(11):1104-12. PMID: 21727247.
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- 30. Einarson A, Bonari L, Voyer-Lavigne S, et al. A multicentre prospective controlled study to determine the safety of trazodone and nefazodone use during pregnancy. Canadian Journal of Psychiatry. 2003;48(2):106-10.
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- 32. Einarson A, Choi J, Einarson TR, et al. Incidence of major malformations in infants following antidepressant exposure in pregnancy: results of a large prospective cohort study. Canadian Journal of Psychiatry Revue Canadienne de Psychiatrie. 2009 Apr;54(4):242-6. PMID: 19321030.
- 33. Einarson A, Choi J, Einarson TR, et al. Adverse effects of antidepressant use in pregnancy: an evaluation of fetal growth and preterm birth. Depression & Anxiety. 2010;27(1):35-8. PMID: 19691030.
- 34. Einarson A, Choi J, Koren G, et al. Outcomes of infants exposed to multiple antidepressants during pregnancy: results of a cohort study. Journal of Population Therapeutics & Clinical Pharmacology. 2011;18(2):e390-6. PMID: 22071601.
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- 37. Ferreira E, Carceller AM, Agogue C, et al. Effects of selective serotonin reuptake inhibitors and venlafaxine during pregnancy in term and preterm neonates. Pediatrics. 2007 Jan;119(1):52-9. PMID: 17200271.
- 38. Figueroa R. Use of antidepressants during pregnancy and risk of attention-deficit/hyperactivity disorder in the offspring. Journal of Developmental & Behavioral Pediatrics. 2010 Oct;31(8):641-8. PMID: 20613624.
- 39. Galbally M, Lewis AJ, Buist A. Developmental outcomes of children exposed to antidepressants in pregnancy. Australian & New Zealand Journal of Psychiatry. 2011 May;45(5):393-9. PMID: 21314237.
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- 45. Jimenez-Solem E, Andersen JT, Petersen M, et al. Exposure to selective serotonin reuptake inhibitors and the risk of congenital malformations: A nationwide cohort study. BMJ Open. 2012;2(3).
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- 47. Jordan AE, Jackson GL, Deardorff D, et al. Serotonin reuptake inhibitor use in pregnancy and the neonatal behavioral syndrome. Journal of Maternal-Fetal & Neonatal Medicine. 2008 Oct;21(10):745-51. PMID: 19012191.
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- 53. Klinger G, Frankenthal D, Merlob P, et al. Long-term outcome following selective serotonin reuptake inhibitor induced neonatal abstinence syndrome. Journal of Perinatology. 2011 Sep;31(9):615-20. PMID: 21311497.
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- 56. Laine K, Heikkinen T, Ekblad U, et al. Effects of exposure to selective serotonin reuptake inhibitors during pregnancy on serotonergic symptoms in newborns and cord blood monoamine and prolactin concentrations. Archives of General Psychiatry. 2003 Jul;60(7):720-6. PMID: 12860776.
- 57. Latendresse G, Ruiz RJ. Maternal corticotropinreleasing hormone and the use of selective serotonin reuptake inhibitors independently predict the occurrence of preterm birth. Journal of Midwifery & Women's Health. 2011 Mar-Apr;56(2):118-26. PMID: 21429075.
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Randomized Controlled Trials

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Appendix C. Excluded Studies

The following full text articles were reviewed for inclusion but failed to meet inclusion criteria for reasons specified below.

1: Foreign language, 2: ineligible outcome, 3: ineligible intervention, 4: ineligible population, 5: ineligible publication type, 6: ineligible study design, 8: outdated or ineligible systematic review.

| Study | Exclusion Code |
|---|-------------------|
| 1. St John's wort and depression: slight efficacy at best, many drug interactions. Prescrire International. 2004 Oct;13(73):187-92. PMID: 15499702 | 5 |
| 2. Neonatal complications after intrauterine exposure to SSRI antidepressants. Prescrire International. 2004 Jun;13(71):103-4. PMID: 15233148 | 5 |
| 3. Bupropion (amfebutamone): caution during pregnancy. Prescrire International. 2005 Dec;14(80):225. PMID: 16400747 | 5 |
| 4. Prenatal exposure to mirtazapine and birth outcomes. Brown University Child & Adolescent Psychopharmacology Update. 2006;8(10):5 PMID: 2009312560. Language: English. Entry Date: 20080125. Publication Type: journal article. Journal Subset: Biomedical | 5 |
| 5. Teratogenicity of SSRI antidepressants: study 2. Nurses' Drug Alert. 2007;31(8):45-6. PMID: 2009641186. Language: English. Entry Date: 20071207. Revision Date: 20101022. Publication Type: journal article | 5 |
| 6. Selective serotonin reuptake inhibitors and birth defects. ACOG Clinical Review. 2008;13(2):12-3. PMID: 2009951120. Language: English. Entry Date: 20080718. Publication Type: journal article | 5 |
| 7. Safety of SSRIs in pregnancy. Obstetrics and Gynecology. 2009;113(5):1162-7. | 5 |
| 8. Study: Both SSRI use and depression in pregnancy linked to risky birth outcomes. Brown University Psychopharmacology Update. 2012;23(6):1-6. PMID: 2011552058. Language: English. Entry Date: 20120608. Revision Date: 20120608. Publication Type: journal article. Journal Subset: Biomedical | 5 |
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| 11. Andrade SE, Raebel MA, Brown J, et al. Use of antidepressant medications during pregnancy: a multisite study. American Journal of Obstetrics & Gynecology. 2008 Feb;198(2):194.e1-5. PMID: 17905176 | 2 |
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| Study | Exclusion Code |
|--|-------------------|
| 15. Bellantuono C, Migliarese G, Gentile S. Serotonin reuptake inhibitors in pregnancy and the risk of major malformations: a systematic review. Human Psychopharmacology. 2007 Apr;22(3):121-8. PMID: 17397101 | 6 |
| 16. Berard A. Paroxetine exposure during pregnancy and the risk of cardiac malformations: what is the evidence? Birth Defects Research. 2010 Mar;88(3):171-4. PMID: 19950383 | 5 |
| 17. Birnbaum CS, Cohen LS, Bailey JW, et al. Serum concentrations of antidepressants and benzodiazepines in nursing infants: A case series. Pediatrics. 1999 Jul;104(1):e11. PMID: 10390297 | 5 |
| 18. Blier P. Pregnancy, depression, antidepressants and breast-feeding. Journal of Psychiatry & Neuroscience. 2006 Jul;31(4):226-8. PMID: 16862240 | 5 |
| 19. Bodnar LM, Sunder KR, Wisner KL. Treatment with selective serotonin reuptake inhibitors during pregnancy: deceleration of weight gain because of depression or drug?.[Erratum appears in Am J Psychiatry. 2006 Oct;163(10):1843]. American Journal of Psychiatry. 2006 Jun;163(6):986-91. PMID: 16741197 | 5 |
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| 23. Bromley RL, Wieck A, Makarova D, et al. Fetal effects of selective serotonin reuptake inhibitor treatment during pregnancy: Immediate and longer term child outcomes. Fetal and Maternal Medicine Review. 2012;23(3-4):230-75. | 8 |
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| 29. Cipriani A, Purgato M, Furukawa TA, et al. Citalopram versus other anti-depressive agents for depression. Cochrane Database of Systematic Reviews. 2012(7)PMID: 00075320-100000000-05154 | 8 |
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| 31. Cohen LS, Altshuler LL, Harlow BL, et al. Relapse of major depression during pregnancy in women who maintain or discontinue antidepressant treatment.[Erratum appears in JAMA. 2006 Jul 12;296(2):170]. JAMA. 2006 Feb 1;295(5):499-507. PMID: 16449615 | 4 |

| Study | Exclusion Code |
|--|-------------------|
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| 33. Cohen LS, Heller VL, Bailey JW, et al. Birth outcomes following prenatal exposure to fluoxetine. Biological Psychiatry. 2000 Nov 15;48(10):996-1000. PMID: 11082474 | 6 |
| 34. Cohen LS, Nonacs RM, Bailey JW, et al. Relapse of depression during pregnancy following antidepressant discontinuation: a preliminary prospective study. Archives of Women's Mental Health. 2004 Oct;7(4):217-21. PMID: 15338315 | 4 |
| 35. Cohen LS, Rosenbaum JF. Birth outcomes in pregnant women taking fluoxetine. New England Journal of Medicine. 1997 Mar 20;336(12):872; author reply 3. PMID: 9072682 | 5 |
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| Study | Exclusion Code |
|--|-------------------|
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| 55. Galbally M, Gentile S, Lewis AJ. Further findings linking SSRIs during pregnancy and persistent pulmonary hypertension of the newborn: Clinical implications. CNS Drugs. 2012;26(10):813-22. | 5 |
| 56. Gentile S. SSRIs in pregnancy and lactation: emphasis on neurodevelopmental outcome. CNS Drugs. 2005;19(7):623-33. PMID: 15984897 | 5 |
| 57. Gentile S. The safety of newer antidepressants in pregnancy and breastfeeding. Drug Safety. 2005;28(2):137-52. PMID: 15691224 | 5 |
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| Study | Exclusion Code |
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| Study | Exclusion Code |
|---|-------------------|
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| Study | Exclusion Code |
|--|-------------------|
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| 116. No authorship i. Depression, SSRIs, and premature birth. The American Journal of Psychiatry. 2009 May;166(5):A22. PMID: Peer Reviewed Journal: 2009-09562-001 | 5 |
| 117. Oberlander TF, Grunau RE, Fitzgerald C, et al. Pain reactivity in 2-month-old infants after prenatal and postnatal serotonin reuptake inhibitor medication exposure. Pediatrics. 2005 Feb;115(2):411-25. PMID: 15687451 | 2 |
| 118. O'Brien LA-M. Critical determinants of the risk-benefit assessment of antidepressants in pregnancy: Pharmacokinetic, safety and economic considerations. Dissertation Abstracts International: Section B: The Sciences and Engineering. 2010;70(10-B):6133. PMID: Dissertation Abstract: 2010-99080-145 | 2 |

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| 120. Oyebode F, Rastogi A, Berrisford G, et al. Psychotropics in pregnancy: safety and other considerations. Pharmacology & Therapeutics. 2012 Jul;135(1):71-7. PMID: 22483705 | 6 |
| 121. Pupco A, Bozzo P, Koren G. Selective serotonin reuptake inhibitors and risk for major congenital anomalies. Obstetrics and Gynecology. 2011;118(4):959-60. | 5 |
| 122. Rahimi R, Nikfar S, Abdollahi M. Pregnancy outcomes following exposure to serotonin reuptake inhibitors: a meta-analysis of clinical trials. Reproductive Toxicology. 2006;22(4):571-5. | 6 |
| 123. Raudzus J, Misri S. Managing unipolar depression in pregnancy. Current Opinion in Psychiatry. 2009 Jan;22(1):13-8. PMID: 19122529 | 6 |
| 124. Reefhuis J, Rasmussen SA, Friedman JM. Selective serotonin-reuptake inhibitors and persistent pulmonary hypertension of the newborn. New England Journal of Medicine. 2006 May 18;354(20):2188-90; author reply -90. PMID: 16707761 | 5 |
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| 132. Sanz EJ, De-las-Cuevas C, Kiuru A, et al. Selective serotonin reuptake inhibitors in pregnant women and neonatal withdrawal syndrome: a database analysis. Lancet. 2005 Feb 5-11;365(9458):482-7. PMID: 15705457 | 6 |
| 133. Schroeder JW, Smith AK, Brennan PA, et al. DNA methylation in neonates born to women receiving psychiatric care. Epigenetics: Official Journal of the DNA Methylation Society. 2012 Apr;7(4):409-14. PMID: 22419064 | 2 |
| 134. Seifritz E, Holsboer-Trachsler E, Haberthur F, et al. Unrecognized pregnancy during citalopram treatment. American Journal of Psychiatry. 1993 Sep;150(9):1428-9. PMID: 8352360 | 5 |
| 135. Shea AK, Kamath MV, Fleming A, et al. The effect of depression on heart rate variability during pregnancy. A naturalistic study. Clinical Autonomic Research. 2008 Aug;18(4):203-12. PMID: 18592128 | 3 |

| Study | Exclusion Code |
|--|-------------------|
| 136. Silvani P, Camporesi A. Drug-induced pulmonary hypertension in newborns: A review. Current Vascular Pharmacology. 2007;5(2):129-33. | 5 |
| 137. Simoncelli M, Martin B-Z, Berard A. Antidepressant use during pregnancy: a critical systematic review of the literature. Current Drug Safety. 2010 Apr;5(2):153-70. PMID: 19534639 | 6 |
| 138. Sockol LE, Epperson CN, Barber JP. A meta-analysis of treatments for perinatal depression. Clinical Psychology Review. 2011 Jul;31(5):839-49. PMID: 21545782 | 6 |
| 139. Sontheimer DL, Ables AZ. Safety of antidepressant medications during pregnancy. JAMA. 2000 Mar 1;283(9):1139. PMID: 10703770 | 5 |
| 140. Speisman BB, Storch EA, Abramowitz JS. Postpartum obsessive-compulsive disorder. JOGNN - Journal of Obstetric, Gynecologic, & Neonatal Nursing. 2011 Nov-Dec;40(6):680-90. PMID: 22092284 | 4 |
| 141. Steinberg SI, Bellavance F. Characteristics and treatment of women with antenatal and postpartum depression. International Journal of Psychiatry in Medicine. 1999;29(2):209-33. PMID: 10587816 | 2 |
| 142. Stewart DE. Are there special considerations in the prescription of serotonin reuptake inhibitors for women? Canadian Journal of Psychiatry - Revue Canadienne de Psychiatrie. 1998 Nov;43(9):900-4. PMID: 9825160 | 5 |
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| 150. Tuccori M, Montagnani S, Testi A, et al. Use of selective serotonin reuptake inhibitors during pregnancy and risk of major and cardiovascular malformations: an update. Postgraduate Medicine. 2010 Jul;122(4):49-65. PMID: 20675971 | 5 |
| 151. Tuccori M, Testi A, Antonioli L, et al. Safety concerns associated with the use of serotonin reuptake inhibitors and other serotonergic/noradrenergic antidepressants during pregnancy: a review. Clinical Therapeutics. 2009 Jun;31 Pt 1:1426-53. PMID: 19698902 | 5 |
| 152. Udechuku A, Nguyen T, Hill R, et al. Antidepressants in pregnancy: a systematic review. Australian & New Zealand Journal of Psychiatry. 2010 Nov;44(11):978-96. PMID: 21034181 | 5 |

| Study | Exclusion Code |
|--|-------------------|
| 153. Ververs T, Kaasenbrood H, Visser G, et al. Prevalence and patterns of antidepressant drug use during pregnancy. European Journal of Clinical Pharmacology. 2006 Oct;62(10):863-70. PMID: 16896784 | 2 |
| 154. Warburton W, Hertzman C, Oberlander TF. A register study of the impact of stopping third trimester selective serotonin reuptake inhibitor exposure on neonatal health. Acta Psychiatrica Scandinavica. 2010 Jun;121(6):471-9. PMID: 19878137 | 6 |
| 155. Watanabe N, Omori IM, Nakagawa A, et al. Mirtazapine versus other antidepressive agents for depression. Cochrane Database of Systematic Reviews. 2011(12)PMID: 00075320-100000000-05204 | 8 |
| 156. Weikum WM, Oberlander TF, Hensch TK, et al. Prenatal exposure to antidepressants and depressed maternal mood alter trajectory of infant speech perception. PNAS Proceedings of the National Academy of Sciences of the United States of America. 2012 Oct;109(Suppl 2):17221-7. PMID: Peer Reviewed Journal: 2012-28317-012 | 5 |
| 157. Wenstrom KD. [Commentary on] Selective serotonin-reuptake inhibitors and risk of persistent pulmonary hypertension of the newborn. Obstetrical & Gynecological Survey. 2006;61(6):370-1. PMID: 2009217667. Language: English. Entry Date: 20060929. Revision Date: 20070105. Publication Type: journal article | 5 |
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| 161. Wu J, Viguera A, Riley L, et al. Mood disturbance in pregnancy and the mode of delivery. American Journal of Obstetrics and Gynecology. 2002;187(4):864-7. | 6 |
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| 163. Yaris F, Ulku C, Kesim M, et al. Psychotropic drugs in pregnancy: A case-control study. Progress in Neuro-Psychopharmacology and Biological Psychiatry. 2005;29(2):333-8. | 1 |
| 164. Yonkers KA, Gotman N, Smith MV, et al. Does antidepressant use attenuate the risk of a major depressive episode in pregnancy? Epidemiology. 2011 Nov;22(6):848-54. PMID: 21900825 | 4 |
| 165. Zeskind PS. [Commentary on] Maternal selective serotonin reuptake inhibitor use during pregnancy and newborn neurobehavior. Obstetrical & Gynecological Survey. 2004;59(8):564-6. PMID: 2004161864. Language: English. Entry Date: 20041001. Publication Type: journal article | 5 |
| 166. Zhou S, Chan E, Pan SQ, et al. Pharmacokinetic interactions of drugs with St John's wort. Journal of Psychopharmacology. 2004;18(2):262-76. | 5 |
| 167. Zuccotti GV, Fabiano V, Manfredini V. Neonates born to mothers using antidepressant drugs. Early Human Development. 2012;88(SUPPL.2):S84-S5. | 5 |

Appendix D. Studies Pending Review

- 1. Grigoriadis S, VonderPorten EH, Mamisashvili L. Antidepressant Exposure During Pregnancy and Congenital Malformations: Is There an Association? A Systematic Review and Meta-Analysis of the Best Evidence. J Clin Psychiatry. 2013 April;74(4):e293-e308. PMID: 23656855.
- 2. Grigoriadis S, VonderPorten EH, Mamisashvili L. The Effect of Prenatal Antidepressant Exposure on Neonatal Adaptation: A Systematic Review and Meta-Analysis. J Clin Psychiatry. 2013 April;74(4):e309-e20. PMID: 23656856.
- 3. Grigoriadis S, VonderPorten EH, Mamisashvili L. The Impact of Maternal Depression During Pregnancy on Perinatal Outcomes: A Systematic Review and Meta-Analysis. J Clin Psychiatry. 2013 April;74(4):e321-e41. PMID: 23656857.

- 4. Painuly N, Heun R, Painuly R, et al. Risk of cardiovascular malformations after exposure to paroxetine in pregnancy: meta analysis. The Psychiatrist. 2013;37(6):198-203.
- 5. Russell EJ, Fawcett JM, Mazmanian D. Risk of Obsessive-Compulsive Disorder in Pregnant and Postpartum Women: A Meta-Analysis. Journal of Clinical Psychiatry. 2013;74(4):377-85. PMID: 23656845.
- 6. Wisner KL, Bogen DL, Sit D, et al. Does Fetal Exposure to SSRIs or Maternal Depression Impact Infant Growth? Am J Psychiatry. 2013 May 1;170(5):485-93.

Appendix E. Strength of Evidence

Key Question 1a. Maternal and Child Benefits: Pharmacotherapy compared with placebo or no treatment

| | Domains pertaining | Magnitude of effect | Strength of evidence | | | |
|--|-------------------------------|------------------------|----------------------|------------------|---|--|
| Number of studies; Number of subjects | Methodological | Consiste | ency Dire | ctness Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Depression | n Symptomotology: Mea | n CES-D Sco | ore¹ | | | |
| 1; N=46 | High (10bservational/High) | Unknown | Direct | Unknown | Third trimester: 14.33 vs 25.93; <i>P</i> =0.0010 | Insufficient |

| | Domains pertaining to | strength of | evidence | | | Magnitude of effect | Strength of evidence |
|--|--|-----------------------|-----------------------------|-------|-----------|--|--|
| Number of studies; Number of subjects | Methodological limitations | Consiste | • | tness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| 1; N=62 | capacity: SF-12 mental confidence Medium (10bservational/Medium) | omponent s Unknown | core ² Direct | Unk | nown | 45.2 vs 35.3, post-hoc Scheffé tests described as showing a significant difference, but results not reported | Insufficient |
| 1; N=200 | Medium (10bservational/Medium) | Unknown | Direct | · | recise | Unadjusted OR 1.73 (95% CI; 0.63-4.42) | Insufficient |
| 1; N=49 | I Development: Brazelton Medium (1Observational/Medium) | Unknown | enaviorai A Direct | | nown | No significant differences on any summary scores for 7 major clusters | Insufficient |

Table 3. Paroxetine compared with placebo during the postpartum period⁵

| | Domains pertaining | Magnitude of effect | Strength of evidence | | | |
|--|-------------------------------|------------------------|----------------------|-----------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Danger to se | elf | | | | | |
| 1; 70 | High (RCT/High) | Unknown | Direct | Imprecise | No episodes | Insufficient |
| Danger to in | nfant | | | | | |

| | Domains pertain | ing to strength of e | vidence | | Magnitude of effect | Strength of evidence |
|----------|---------------------------|----------------------|---------|-----------|---------------------|----------------------|
| 1; 70 | High | Unknown | Direct | Imprecise | No episodes | Insufficient |
| | (RCT/High) | | | · | • | |
| Depressi | on response ¹ | | | | | |
| 1; 70 | High | Unknown | Direct | Imprecise | OR 1.31 (0.50- | Insufficient |
| | (RCT/High) | | | | 3.41) | |
| Depressi | on remission ² | | | | | |
| 1; 70 | High | Unknown | Direct | Precise | OR 3.54 (1.10- | Insufficient |
| | (RCT/High) | | | | 11.41) | |
| Breastfe | eding | | | | | |
| NA | NA | NA | NA | NA | No evidence | Insufficient |
| Weight g | ain | | | | | |
| NA | NA | NA | NA | NA | No evidence | Insufficient |
| 1 - | | | | \ | | |

¹ Response at week 8 as measured by Clinical Global Impression-Improvement (CGI-I) of 1 or 2.

Key Question 1b. Maternal and Child Benefits: Pharmacological treatments compared with each other

Table 4. Sertraline compared with nortriptyline during the postpartum period

| | Domains pertaining | to strength of evi | dence | | Magnitude of effect | Strength of evidence |
|--|-------------------------------|--|----------|------------------------------------|--|----------------------|
| Number of studies; Number of subjects | Methodological Limitations | Limitations Consistency Directness Precision | | Summary effect size (95% CI) | High, moderate, low, insufficient | |
| Depression | response ¹⁶ | | | | | |
| 1; 109 | High (RCT/High) | Unknown | Direct - | Imprecise | Week 4: OR 0.79 (0.28-2.19) | Insufficient |
| | | Officiowif | | Imprecise | Week 8: OR 0.99 (0.29-3.42) | Insufficient |
| Depression | remission ²⁶ | | | | | |
| | High | Halmann | Direct | Imprecise | Week 4: OR 1.04 (0.41-2.65) | Insufficient |
| 1; 109 | (RCT/High) | Unknown | | Imprecise | Week 8: OR 1.75 (0.69-4.38) | Insufficient |
| Intention to | Breastfeed | | | | | |
| | NA | NA | NA | NA | No evidence | Insufficient |
| Duration of | Breastfeeding ³⁷ | | | <u> </u> | | · |
| 1; 70 | High (RCT/High) | Unknown | Direct | Imprecise | Week 8: OR 2.78 (0.86-8.94) | Insufficient |
| Weight gain | l | | | | • | |
| NA | NA | NA | NA | NA | No evidence | Insufficient |
| | | | | | | |

Response is considered >= 50% reduction in Hamilton Rating Scale for Depression (HSRD).

Remission is considered a Hamilton Rating Scale for Depression (HRDS) <7.

Reported as breast feeding yes or no at 8th week of study.

² Remission by week 8 as measured by the 17 Item Hamilton rating Scale for Depression (HAM-D-17) \leq 8.

Key Question 1d2. Maternal and Child Benefits: Pharmacological treatments plus nonpharmacological treatment compared with nonpharmacological treatments alone

Table 5. SSRIs plus psychotherapy compared with psychotherapy alone during pregnancy⁸

| | Domains pertaining to | Magnitude of effect | Strength of evidence | | | |
|--|-------------------------------|---------------------------|----------------------|---------------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological limitations | Consister | ıcy Directr | ess Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Depression | Symptomotology: BDI m | aximum score ⁸ | | | | |
| 1; N=44 | Medium | Unknown | Direct | Imprecise | 21.3 vs 24.0; | insufficient |
| | (1Observational/Medium) | | | | P=0.58 | |
| Breastfeed | ing: Mean duration in mon | ths | | | | |
| 1; N=44 | Medium | Unknown | Direct | Imprecise | 8.5 vs 6.4; <i>P</i> = | Insufficient |
| | (Observational/Medium) | | | | 0.4 | |

Table 6. Sertraline and brief dynamic psychotherapy compared with brief psychodynamic psychotherapy during the postpartum period⁹

| | Domains pertaining to | | Magnitude of effect | Strength of evidence | | |
|--|-------------------------------|-------------|---------------------|----------------------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Depression | response ¹ | | | | | |
| 1; 40 | Medium (RCT/Medium) | Unknown | Direct | Imprecise | Week 8: OR 1.91 (0.52-7.00) | Low |
| Depression | remission ² | | | | | |
| 1; 40 | Medium (RCT/Medium) | Unknown | Direct | Imprecise | Week 8: OR 3.09 (0.78-12.14) | Low |
| | | | | Imprecise | Week 12: OR 3.64 (0.34-39.02) | Low |

¹ Response was defined as >50% reduction in MADRS or EPDS scores.

Table 7. Paroxetine plus cognitive behavioral therapy compared with cognitive behavioral therapy alone during the postpartum period¹⁰

| | Domains pertaining to | strength of evi | dence | | Magnitude of effect | Strength of evidence |
|--|-------------------------------|-----------------|------------|-----------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Depression | response ^{1, 2} : | | | | | |
| 1; 87 | Medium (RCT/Medium) | NA | NA | NA | No evidence | Insufficient |

 $^{^{2}}$ Remission was considered as final score on the MADRS of <10 or the EPDS <7.

Key Question 1d3. Maternal and Child Benefits: Comparing Pharmacological Treatments Alone with Pharmacological Treatments Used in Combination with Nonpharmacological Treatments

Table 8. Paroxetine compared with paroxetine plus cognitive behavioral therapy during the postpartum period¹¹

| | Domains pertaining to | Magnitude of effect | Strength of evidence | | | |
|--|-------------------------------|---------------------|----------------------|-----------|--|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Depression | response ^{1, 2} : | | | | | |
| 1. 25 | Madium (DCT/Madium) | Linknoven | Direct | Imprecise | HAM-D ¹ : OR 1.87 (0.29-11.84) | Low |
| 1; 35 | Medium (RCT/Medium) | Unknown | Direct | Imprecise | EPDS ² : OR 2.71 | Low |
| | | | | | (0.73-10.04) | |

¹Response on Hamilton Rating Scale for Depression (HAM-D) (>= 50% score reduction).

Table 9. Sertraline compared with sertraline plus interpersonal psychotherapy during the postpartum $period^{12}$

| | Domains pertaining | Magnitude of effect | Strength of evidence | | | |
|--|-------------------------------|------------------------|----------------------|-----------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Depression | response | | | | | |
| 1; 23 | High (RCT/High) | Unknown | Direct | Imprecise | No significant differences * | Insufficient |
| Depression | remission | | | | | |
| 1; 23 | High (RCT/High) | Unknown | Direct | Imprecise | No significant differences * | Insufficient |

^{*} ANCOVA adjusted for pretreatment depression

Key Question 2a. Maternal and Child Harms: Pharmacotherapy compared with placebo or no treatment

Table 10. SSRIs compared with no treatment during pregnancy

| | Domains pertaining t | | Magnitude of effect | Strength of evidence | | |
|--|---------------------------------------|------------|---------------------|----------------------|--|--|
| Number of studies; Number of subjects | Methodological limitations | Consiste | ncy Direc | tness Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Major malfo | ormations ² | | | | | |
| 1; N=72 | Medium (1 Observational/Medium) | Unknown | Direct | Imprecise | No events | Insufficient |
| Convulsion | ns ¹³ | | | | | |
| 1; N=15,685 | Medium (1 observational/Medium) | Unknown | Direct | Precise | 0.14% vs 0.11%; RD 0.0005; 95% CI, -0.0015 to 0.0025) | Low |
| Respiratory | y Distress ^{2, 8, 13} | | | | | |
| 3; | Medium (3 | Consistent | Direct | Precise | Pooled | Low |

²Response on Edinburgh Post Natal Depression Scale is (EDPS) (>= 50% score reduction).

| | Domains pertaining to strength of evidence | | | | | Strength of evidence |
|--|--|-------------|------------|-----------|---|--|
| Number of studies; Number of subjects | Methodological | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| N=15,793 | observational/Medium) | | | | unadjusted OR 1.91 (95% CI, 1.63 to 2.24) | |

Table 11. Bupropion compared with no treatment during pregnancy

| | Domains pertaining t | Magnitude of effect | Strength of evidence | | | |
|--|-------------------------|------------------------|-------------------------|-----------------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological | Consiste | ency Direc | tness Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Major malfo | ormations ¹⁴ | | | | | |
| 1; N=126 | High | Unknown | Direct | Imprecise | No events | Insufficient |
| | (1 Observational/ High) | | | | | |

Key Question 2b. Maternal and Child Harms: Pharmacological treatments compared with each other

Table 12. SSRI's compared with TCAs (nortriptyline) during pregnancy

| | Domains pertaining to | strength of | evidence | | Magnitude of effect | Strength of evidence |
|--|-----------------------------------|-------------|-----------|-----------------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological | Consiste | ncy Direc | tness Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Respirator | y Distress ¹⁵ | | | | | |
| 1; N=21 | Medium (1Observational/Medium) | Unknown | Direct | Imprecise | 10% vs 0%; P not reported | Insufficient |

Table 13. SSRI's compared with SSRIs during pregnancy

| | Domains pertaining to | strength of | evidence | | | Magnitude of effect | Strength of evidence |
|--|--------------------------------|-------------|------------|------|-----------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological limitations | Consister | ncy Direct | ness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Respiratory | y Distress ¹⁵ | | | | | | |
| 1; N=20 | Medium (10bservational/Medium) | Unknown | Direct | Imp | recise | 22% vs 0%, <i>P</i> =NR | Insufficient |

Table 14. Sertraline compared with nortriptyline during the postpartum period⁶

| | Domains pertaining | to strength of | evidence | | | Magnitude of effect | Strength of evidence |
|--|-------------------------------|----------------|-------------|------------|------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological | Consisten | cy Directr | iess Preci | sion | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Overall adv | erse events and withdra | awals due to a | dverse ever | nts | | | |
| 1; N=109 | High (1Observational/High) | Unknown | Direct | Imprecise | | No events | Insufficient |

Key Question 2d2. Maternal and Child Harms: Pharmacological treatments plus nonpharmacological treatment compared with nonpharmacological treatments alone

Table 15. SSRIs plus psychotherapy compared with psychotherapy alone during pregnancy⁸

| Domains pertaining to strength of evidence | | | | | Magnitude of effect | Strength of evidence |
|--|----------------------------------|----------|------------|------------------|--|--|
| Number of studies; Number of subjects | Methodological | Consiste | ency Direc | ctness Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Major malf | ormations | | | | | |
| 1; N=44 | Medium (Observational/Medium) | Unknown | Direct | Imprecise | Unadjusted OR 0.40; 95% CI, 0.02 to 6.93 | Insufficient |

Table 16 Sertraline and brief dynamic psychotherapy compared with brief psychodynamic psychotherapy during the postpartum period⁹

| | Domains pertaining | to strength of evi | dence | | Magnitude of effect | Strength of evidence |
|--|-------------------------------|--------------------|------------|-----------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| % Discontinuing due to adverse events | | | | | | |
| 1; 40 | Medium | Unknown | Direct | Precise | OR 5.54 (0.25- | Insufficient |
| | (RCT/Medium) | | | | 123.09) | |

Table 17. Fluoxetine plus cognitive behavioral therapy compared with cognitive behavioral therapy alone during the postpartum period¹⁰

| | Domains pertaining | to strength of evi | dence | | Magnitude of effect | Strength of evidence |
|--|-------------------------------|--------------------|------------|-----------|---|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| % Discontin | uing due to adverse e | vents | | | | |
| 1; 87 | Medium (RCT/Medium) | Unknown | Direct | Imprecise | 1 session: 0% vs 9%; P not reported | Insufficient |
| | | | | | 6 sessions: 5% vs 5%; P not reported | |

Table 18. Sertraline plus interpersonal therapy compared with interpersonal therapy alone during the postpartum period¹²

| | Domains pertaining | to strength of evid | dence | | Magnitude of effect | Strength of evidence |
|--|-------------------------------|---------------------|------------|-----------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| % Discontinuing due to adverse events | | | | | | |
| 1; 23 | High (RCT/High) | Unknown | Direct | Imprecise | No events | Insufficient |

Key Question 2d3. Maternal and Child Harms: Pharmacological treatments alone compared with pharmacologicala treatments plus nonpharmacological treatments

Table 19. Sertraline alone compared with sertraline plus interpersonal therapy during the postpartum period¹²

| | Domains pertaining | to strength of evi | dence | | Magnitude of effect | Strength of evidence |
|--|-------------------------------|--------------------|------------|-----------|------------------------------------|--|
| Number of studies; Number of subjects | Methodological Limitations | Consistency | Directness | Precision | Summary effect size (95% CI) | High, moderate, low, insufficient |
| Overall adve | erse events | | | | | |
| 1; 23 | High (RCT/High) | Unknown | Direct | Imprecise | No events | Insufficient |

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Appendix F. Evidence Tables

Evidence Table 1. Data Abstraction of Observational Studies

| | Population Characteristics | | |
|--|---|---|---|
| Author Year Country Study Design/Data Source Risk of Bias Alwan 2007¹ US Arm of Case Control Studied, Population based | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race: W: 60.5%; AA: 11%, Hisp 23%, other 5.5%. Age: <35y: 84%/>35y: 15%. Income: 20K: 32%/20-4999: 32.5%/ >50K: 35% Home: NR; Planned Pg: NR; Partner NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities: NR. Other meds: , 1%; Prov Chara: NR; Med Care env: NR | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms % Dx: NR; Fam Hx NR; Prior use: NR; Sx Severity NR; Time of Dx NR; Dx method: NR. Tx began: before pg/during pg. |
| Medium Alwan 2010² Canada Case-control/Data Source [CC] Medium | (cases vs. controls) Race 60% vs. 60% White, 39.4% vs. 39.7% Other Age: <35 years 84.7% vs. 86.1% >35 years 15.3% vs. 13.9% SES: Education <12 years 44.8% vs. 41.9% 1>2 years 55.2% vs. 58.1% Income: <\$20,000 33.9% vs. 32.0% >\$20,000 66.1% vs. 68.0% Home situation: NR Unplanned pregnancy % Marital/partner status: NR Smoking% ETOH: 37% vs. 37% Substance abuse: NR | Mental health comorbidities NR Use of other psychoactive drugs NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits) Medical care environment (community/private/public clinic or hospital) | 100% with diagnosis (exposed) Family history of depressive/mood disorders: NR Prior use of antidepressive drugs: NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| Andrade, 2009 ³ US Retrospective Cohort/Data Source [AD] Medium | Major: 1.51 (1.21-1.87)/0.69 (0.34-1.4)/1.18 (0.86-1.61)/1.25 (0.84-1.85)/1.41 (1.03-1.92) | Mental health comorbidities: NR Use of other psychoactive drugs: NR Provider characteristics: NR Medical care environment: Hospital | % with diagnosis NR Family history of depressive/mood disorders: NR Prior use of antidepressive drugs (%, for treatment or prevention) NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |

| | Population Characteristics | | |
|--|--|--|--|
| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Bakker 2010 ⁴ CC/PBD Netherlands Medium | Race %: NR Mean Age: 30.3 SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR | NR | NR |
| Bakker 2010 ⁵ The Netherlands Case-Control Medium | Race: NR Mean Age: 31 SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR | NR | NR |
| Ban, 2012 ⁶ U.K. PBD Medium | Race: NR Age: 15-17: 2.0%, 18-24: 21.4%, 25-34: 55%, 35-45: 21.6% SES: Townsend deprivation index score-1(least deprived): 22.8%, 2: 18.9%, 3:19.6%, 4: 19.0%, 5: 14.5% Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Maternal history of smoking: 40.6% | Provider characteristics: Primary care Other: NR | NR |
| Berard, 2007 ⁷ Canada, Quebec LD Medium | Race %: NR Mean Age: 29.29 SES: Welfare Beneficiaries in years before pregnancy: 49.1% Home situation: Living alone in years before pregnancy: 69.3% Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: 52.1% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention):NR -Symptom severity:NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
|--|--|---|---|
| Author Year Country Study Design/Data Source Risk of Bias Bogen 2010/companion Wen 2009 ⁸ U.S. PC | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: White/Other: 79.2%, African American: 20.8% Age:<31: 50.6%, ≥31: 49.4% SES: NR Home situation: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities: NR Use of other psychoactive drugs: NR Provider characteristics: Obstetrician, community worker | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms % with diagnosis: of MDD: 23%, % of patients with 1 episode of MDD: 30% Mean HDRS score: 13.28 (SD 4.4) Others: NR |
| | Unplanned pregnancy %: NR Marital/partner status: Married (or living as married): Yes:72.6%, No 27.4% Smoking%: 13.1%, ETOH: NR Substance abuse%: NR | | |
| Boucher, 2008° Canada LD Medium | Race: NR Mean Age: 29.5 SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking: 22.5% ETOH: 3% (occasional) Substance abuse: NR | Mental health comorbidities: NR Use of other psychoactive drugs: olanzapine (n=2), risperidone (n=2), alprazolam (n=3), bromazepam (n=1), clonazepam (n=7), lorazepam (n=4), Provider characteristics: NR Medical care environment: Secondary and tertiary care facilities hospital | NR |
| Casper 2003 ¹⁰ US, California Cohort study Data/Source: [CC] | Individual SSRIs: citalopram/escitalopram/fluoxetine/paroxetine/sertraline | Use of other psychoactive drugs: NR Provider characteristics: primary care and/or psychiatrist Medical care environment: public clinic | 100% with diagnosis Family history of depressive/mood disorders: NR Prior use of antidepressive drugs: NR |
| iviedium | | | Symptom severity: (Likert scale, mean) exp vs. unexp: 1–3 months 4.2 (2.5) vs. 5.0 (2.5) 4–6 months 5.4 (3.2) vs. 5.0 (2.8) 7–9 months 6.1 (2.3) vs. 4.8 (3.0) Time of diagnosis: During pregnancy Diagnosis method: NR |

| | T5 10 50 110 | | T |
|---|---|---|--|
| | Population Characteristics | | |
| Author Year Country Study Design/Data Source Risk of Bias Chambers, 1996 ¹¹ US, California CC Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: NR Mean Age: 30.87 SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: Exposed early group: 10%, Exposed late group: 17.8%, Controls, 3.8% ETOH: Exposed early group: 5.0%, Exposed late group: 1.5%, controls: 0.0% Substance abuse%: <1% | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): Anxiety 8.1%, panic disorder 6.4%, bipolar disorder 5.8%, obsessive-compulsive disorder 4.0% Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): benzodiazepines: 17.5%, trazodone: 5.2%, tricyclic 5.2% Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): hospital | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Chambers, 2006 ¹² US CC Medium | Race: 68.2% white, 11.8% black, 6% Asian, 11.2% Hispanic, 2.8% other Mean Age: <25: 25.3%, 25-30: 28.4%, 30-35: 30.8%, >35: 15.5% SES (education): <13 years: 29.8%, 13-15 years: 28.1%, >15 years: 42.1% Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking: Never: 59.3%, before pregnancy: 45.9%, during pregnancy: 16.7% ETOH: Never: 51.7%, before pregnancy: 23.9%, during pregnancy: 2.4% Substance abuse: NR | Mental health comorbidities: NR Use of other psychoactive drugs: NR Provider characteristics: Neonatologists Medical care environment: NICU | NR |
| Cole 2007 ¹³ US Case-control/Data Source[AD] Medium | Race NR Mean Age: 31 years SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking NR ETOH NR Substance abuse NR | Mental health comorbidities: (Monotherapy exposed vs. other Mono- or Poly therapy exposed vs. other) Bipolar disorder 1.0 vs. 0.7 vs. 1.0 vs. 0.8 Use of other psychoactive drugs: Carbamazepine: 0% vs. 0.2% vs. 0.1 vs. 0.2% Provider characteristics: physician Medical care environment: NR | % with diagnosis Family history of depressive/mood disorders: NR Prior use of antidepressive drug: Women received sertraline before pregnancy, but prescription did not overlap with the first trimester Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |

| | Population Characteristics | | |
|--|--|---|---|
| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Cole, 2007 ¹⁴ | Age: 12-19: 1.5%, 20-24: 9.0%, 25-29: 28.1%, 30-34: 35.7%, 35-39: 20.4%, | Mental health comorbidities: NR | NR |
| US | 40-49: 5.1% | Use of other psychoactive drugs: NR | |
| LD | Other characteristics NR | Provider characteristics: NR | |
| Low | D. W. ND | Medical care environment: NR | NB |
| Colvin 2012 ¹⁵ PBD/CC Australia Medium | Race %: NR Mean Age: 30.05 SES: SEIFA = 997.1 Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR | NR | NR |
| Croen, 2011 ¹⁶ US, California | Race %: White, non-Hispanic: 47.8%; White, Hispanic: 19.2%; Black: 9.9%; Asian: 9.8%; Other: 13.3% | Mental health comorbidities % (e.g. anxiety) Use of other psychoactive drugs % | Depression Characteristics: -% with diagnosis |
| CC | Mean Age: 30.42 | (antipsychotics, antianxiety agents (e.g., | -Family history of depressive/mood disorders |
| Medium | SES: Education: <high %:="" 1.2%="" 15.5%;="" 25.4%;="" 51.0%;="" 6.9%;="" abuse%:="" college:="" etoh:="" high="" home="" marital="" nr="" nr<="" partner="" postgraduate:="" pregnancy="" school:="" situation:="" smoking%:="" status:="" substance="" td="" unknown:="" unplanned=""><td>benzodiazepines), and drugs for insomnia) Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits) Medical care environment (community/private/public clinic or hospital)</td><td>(%) -Prior use of antidepressive drugs (%, for treatment or prevention) -Symptom severity -Time of diagnosis -Diagnosis method -When treatment commenced relative to the onset of symptoms</td></high> | benzodiazepines), and drugs for insomnia) Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits) Medical care environment (community/private/public clinic or hospital) | (%) -Prior use of antidepressive drugs (%, for treatment or prevention) -Symptom severity -Time of diagnosis -Diagnosis method -When treatment commenced relative to the onset of symptoms |
| Davidson, 2009 ¹⁷ | Race %: NR | Mental health comorbidities % (e.g. | Depression Characteristics: |
| Israel | Mean Age: 29.71 | anxiety): NR | -% with diagnosis: NR |
| CC Medium | SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NSD between groups ETOH: 0% Substance abuse%: NR | Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): hospital | -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
|---|---|---|--|
| Author Year Country Study Design/Data Source Risk of Bias Davis, 2007 ¹⁸ US LD Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: NR Mean Age: NR SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking %: NR ETOH: NR Substance abuse %: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (pcp, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): hospital | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Dubnov-Raz, 2008 ¹⁹ Israel CC Medium | Race %: NR Mean Age: NR SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): Excluded women treated with any other chronic medication Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): hospital | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Dubnov-Raz, 2012 ²⁰ Israel CC Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: NR Mean Age: 33.2 years SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: 10% ETOH: 0% Substance abuse%: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): Hospital | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| El Marroun 2012 ²¹ Netherlands Prospective Cohort*Data Source [PC and PD] Low | Of the nervous system: 0.84 (0.21-3.37)/2.25 (0.32-16.05)/1.44 (0.36-5.79)/1.19 (0.17-8.45)/0.85 (0.12-6.07) | Mental health comorbidities % Anxiety Use of other psychoactive drugs: benzodiazepine % | 7.4% with diagnosis Family history of depressive/mood disorders: NR Prior use of antidepressive drugs: N= 188 (excluded) Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| Ferreira 2007 ²² US Retrospective Cohort/Data Source[AD] Medium | Neural tube defects: Only fluoxetine=3.22 (0.45-23.03) | Mental health comorbidities: mixed disorders 26%, other anxiety disorders 16%, generalized anxiety disorders 3% Use of other psychoactive drugs: N=2 lithium .02% N=1 olanzapine .01% | 41 % with diagnosis Family history of depressive/mood disorders: NR Prior use of antidepressive drugs (%, for treatment or prevention) NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| | | Provider characteristics NR Medical care environment: hospital | |

| | Population Characteristics | | |
|---|--|---|---|
| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Figueroa 2010 ²³ US Retrospective cohort Design/Data Source[AD] Medium | Of the eye: 2.62 (1.09-6.34)/None/0.93 (0.13-6.63)/None/1.05 (0.15-7.45) | Mental health comorbidities: Anxiety disorder N=1978 5.20% Adjustment disorder N= 1486 3.90% Other mental illness N=533 1.40% Bipolar disorder N=334 0.88% ADHD N=196 0.51% MR, PDD, or organic disorder N=168 0.44% Psychotic disorder N= 68 0.18% Use of other psychoactive drugs: Benzodiazepines during pregnancy N=311 0.82% Anticonvulsants during pregnancy N=147 0.39% Other psychotropics during pregnancy N=67 0.18% Provider characteristics: NR Medical care environment: mental health outpatient clinic | Depressive disorders N =3923 10.3% with diagnosis Anxiety disorder N=1978 5.20% Adjustment disorder N=1486 3.90% Other mental illness N= 533 1.40% Bipolar disorder N=334 .88% Family history of depressive/mood disorders: NR Prior use of antidepressive drugs (%, for treatment or prevention) NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| Gorman, 2012 ²⁴ US, California Prospective cohort/TIS Medium | Race %: 66% white, 20% Hispanic, 9% Asian, 5% Other Mean Age: 32.2 SES: Report any available values: 14% Low, 17% Medium, 69% High Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR | NR | NR |
| Grzeskowiak 2012 ²⁵ Australia Retrospective cohort/LD Medium | Race: 79% white, 9.6% Asian, 11% Other Mean Age: 29.2 Socioeconomic status (Socio-Economic Indexes for Areas, calculated from the Australian Bureau of Statistics'): 5 (highest)=20%, 4=20%, 3=18%, 2=20%, 1 (lowest)=22% Home situation NR Unplanned pregnancy NR Marital/partner status NR | Use of other psychoactive drugs: 1% anxiolytic use Provider characteristics NR Medical care environment NR | NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Heikkinen, 2002 ²⁶ Finland PC | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race: NR Mean age: 32.6 SES: NR Home situation: NR Unplanned pregnancy: NR Marital status: NR % smoking: 23.8% ETOH %: light alcohol use: 9.5% | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety):NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): 0% Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): Psychiatrists, pediatrician Medical care environment (community/private/public clinic or hospital):NR | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms % with depression: 28.6% Family history of depressive/ mood disorders: NR Prior use of antidepressive drugs: NR Symptom severity: NR Time of diagnosis: NR When treatment commenced relative to onset of symptoms: NR |
| Jimenez-Solem 2012 ²⁷ Denmark RC-PD Low | Race NR Age: <20-3%, 21-25=15%, 26-30=38%, 31-35=32%, >35=12% SES: Annual household income <\$58,338=25%, \$58335-\$93-656=25%, \$93,656-\$119,082=25%; Education, short=33%, medium=30%, long=32% Home situation NR Unplanned pregnancy NR Marital/partner status NR Smoking: Daily cigarettes 0=78%, 1-10=15%, 11-20=0.6%, >20=2.4% ETOH NR Substance abuse NR | NR | NR |
| Jimenez-Solem, 2013 ²⁸ Denmark PBR Low | Race: NR Mean Age: <20: 2.9%; 21-25: 16.2%, 26-30: 38.4%, 31-35: 30.9%, >35: 11.6% SES: Education level low: 35.5%, medium: 32.5%, high: 31.8% Annual household income: <62,192: 24.9%, 62,192-89,140: 25.0%, 89,141-126,344: 25.0%, >126,344: 25.0% Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking (cigarettes/day): 0: 80.9%, 1-10: 12.8%, 11-20: 5.2%, >20: <1% ETOH: NR Substance abuse: NR | Mental health comorbidities: NR Use of other psychoactive drugs: NR Provider characteristics: NR (stillbirth and neonatal mortality) Medical care environment: NR | NR |

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| | Population Characteristics | | Depression Characteristics: Percent with Diagnosis |
| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Jordan 2008 ²⁹ US Clinic Appt Logs, Pediatrics records review AD Medium | W= .06%; AA 14%; Hisp 78%; Other .03% Mean Age: 27. Home Situation NR. Unplanned pg NR. Partner status NR | Mental Health comorbidities: Anx=12% in SRI pgs v06% non subjects; Adj DO 4% SRI gp/24% non SRI gp=15% all. BAD 4% SRI/12% non SRI = 0.8% all. Other drugs: Benzo (N=3). Med Care Envir: Hospital | % with Dx: NR Fam Hx NR; Prior use NR; Sx Severity NR; Dx method: NR; Tx/onset sxs: NR |
| Kallen, 2004 ³⁰ Sweden PBR Medium | Race %: NR Age: 13-19, 0.8%; 20-24, 10.8%; 25-29, 26.8%; 30-34, 34.4%; 35-39, 22.0%; 40-44, 4.9%; ≥45, 0.2% SES: NR Home situation: Cohabitating, 84.5% Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: 30.5% in early pregnancy ETOH: NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): Anticonvulsants, 1.6%; Neuroleptics, sedatives, hypnotics, 18.7% Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Kallen 2007 ³¹ Sweden Retrospective cohort/Data Source[PBR] Medium | Of the ear, face and neck: None/None/None/8.32 (1.16-59.81)/6.13 (0.85-44.05) | Mental health comorbidities %:NR Use of other psychoactive drugs: Clomipramine N=57 Trimipramine N= 2 Amitriptyline N=21 Nortriptyline N=4 Moclobemide N=3 Mianserin N=32 Nefazodone N=3 Mirtazapine N=27 Venlafaxine N=30 Reboxetine N=3 | % with diagnosis: NR Family history of depressive/mood disorders: NR Prior use of antidepressive drugs NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| | | Provider characteristics NR Medical care environment NR | |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Kallen 2008 ³² Sweden Unclear/Data Source[PBR] | Of the heart: 1.91 (1.31-2.77)/1.06 (0.34-3.3)/2.05 (1.27-3.31)/1.54 (0.77-3.1)/2.73 (1.75-4.26) | Mental health comorbidities % Use of other psychoactive drugs % Provider characteristics: NR Medical care environment: NR | % with diagnosis: NR Family history of depressive/mood disorders: NR Prior use of antidepressive drugs: NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| Kieler 2012 ³³ Nordic countries Retrospective cohort, PBD Medium | Age: ≤ 24=16.3%, 25-34=66.2%, 35-44=17.3%, ≥ 45=0.1% Others NR | NR | NR |
| Kornum, 2010 ³⁴ Denmark PBR Medium | Race %: NR Mean Age: Median Age 29.8 SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: With SSRI in first trimester or 30 days before conception: 35.8%, With SSRI in second or third month after conception: 31.8%, No SSRI: 20.6% ETOH: NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): excluded women with both SSRI and non-SSRI antidepressants Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Laine 2003 ³⁵ Finland Prospective cohort/Data Source[PC] Medium | Race %: NR Mean Age: 32.5 SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking: 60% vs 10% ETOH: 10% vs. 0% | Mental health comorbidities: 50% panic disorder Use of other psychoactive drugs 3% benzodiazepines Provider characteristics: primary care physician | 50% with diagnosis N=10 Family history of depressive/mood disorders: NR Prior use of antidepressive drugs (%, for treatment or prevention) NR Symptom severity: NR |
| | Substance abuse: NR | Medical care environment: private/public clinic | Time of diagnosis: NR Diagnosis method: NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Latendresse, 2011 ³⁶ U.S. PS Medium | Ethnicity: Hispanic 24%, Race: white: 69%, Hispanic/Mexican: 13%, African American, Other: 18% Mean age: NR SES: health insurance: private 56%, state Medicaid: 33%, Uninsured/self pay: 11% Home situation: NR Unplanned pregnancy: NR Marital status: married: 64%, living with partner: 13%, single: 21%, divorced/separated: 2% Smoking:<5%, ETOH:<5%, substance abuse:<5% | Anxiety: % NR Use of other psychoactive drugs: NR Provider characteristics: NR Medical care environment: community | % with diagnosis: 1% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Lennestal, 2007 ³⁷ Sweden PBR Medium | Race %: NR Mean Age: NR; Age distribution: <20: 132, 20-24: 950, 25-29: 2032, 30-34: 2347, 35-39: 1426, 40-44: 306, ≥45: 19 SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: 27.4% ETOH: NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): Neuroleptics, sedatives, hypnotics: 21.2% of SNRI users Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Levinson-Castiel, 2006 ³⁸ Israel PC, PBD Medium | Race: NR Maternal Mean age: 31.8 years Socio-economic status: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR % Smoking: NR ETOH: NR Substance abuse %: NR | NR | NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Lewis 2010 39 | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities NR | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms 100% with diagnosis Family history of depressive/mood disorders NR |
| Australia PC-Clinic Medium | Mean Age=32.3 years SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: Married=72%; de facto=22%; Widowed=5.6% Smoking: 15% ETOH: 48% Substance abuse: 5.6% | Use of other psychoactive drugs: 41% medication other than antidepressants Provider characteristics: NR Medical care environment: NR | Prior use of antidepressive drugs NR Symptom severity NR Time of diagnosis NR Diagnosis method: Independent psychiatric evaluation When treatment commenced relative to the onset of symptoms: NR |
| Logsdon, 2011 ⁴⁰ US, Pennsylvania PC Medium | Race %: White 79.5%, AA 18.1%, Other 2.3% Mean Age (SD): 30.4 (5.7) SES: Education level: high school or less 18.7%, Some college 16.4%, college 40.7%, graduate school 24.3%; Employment/academic status: Not at all 33.2%, Occasional 1.9%, Part time 10.3%, Full time 54.7%, Employed/attending school 66.8% Home situation: Partner, no children 30.2%, Partner and children 46.0%, Alone, no children 11.6%, Alone with children 9.3%, Parents, no children 0.5%, Parents and children 2.3% Unplanned pregnancy %: NR Marital/partner status: S 21.4%, Married/cohabitating 75.8%, Divorced/separated 2.3% Smoking %: NR ETOH: NR Substance abuse %: NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): excluded women using benzodiazepines Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): Psychiatrist Medical care environment (community/private/public clinic or hospital): clinic | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Louik 2007 ⁴¹ US CC | Race: NR Mean Age: NR SES: NR Home situation: NR Unplanned pregnancy %:NR Marital/partner status: NR Smoking%:NR ETOH:NR Substance abuse%:NR | None reported | None reported |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Lund, 2009 ⁴² | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms % with diagnosis reported in patients with |
| Denmark PC Medium | Maternal age<20: 1.5%20-24:12.1%, 25-29:38.4%, 30-34:33.8%, ≥35:14.3% Nonsmoker: 78.4% Smoking cigarettes/day: 1-4:3.8%, 5-9:5.9%,10-14:5.9%, ≥15:3.2% Home situation: NR Unplanned pregnancy: NR Marital status Married/cohabiting: 89.9%, living alone: 2.9% ETOH (alcohol intake):<1:73.4%, 1-4:19.7%, 5-9:1%, ≥10:1.3% Education, years <9:15.8%, 9-12:26%, >12:37.5% | Patients with psychiatric history but no use of SSRI group: schizophrenia: 0.2%, eating-disorder: 1%, bipolar disorder: 0.2%, OCD:0.4%, stress: 0.2%, anxiety: 0.5%, unspecified: 1.8% Use of other psychoactive drugs in SSRI use patients: benzodiazepines 2.4%, antipsychotics:4%, TCA: 3%, mirtazapine: 1.5%, venlafaxine:2.1%, sleeping pills: 0.6%, lithium: 0.3% Use of other psychoactive drugs in psychiatric history but no SSRI use patients: psychotropics: 0.5%, antipsychotics: 0.4%, anxiolytics: 0.3%, antidepressants other than SSRI: 0.7% Provider characteristics: GP, psychiatrist, psychologist | psychiatric history but no SSRI: 1.8% |
| Malm, 2011 ⁴³ Finland TIS Low | Race %: NR Mean Age: Median Age 29.4 SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: Married 60.20% Smoking%: 14.67% ETOH: NR Substance abuse%: NR | Medical care environment: hospital Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): 27.98% Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias McFarland, 2011 ⁴⁴ US, Rhode Island PC Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: Non White 13.04%, Hispanic 17.39% Mean Age: 29.1 SES: low SES 11.80% Home situation: NR Unplanned pregnancy %: NR Marital/partner status: Single 32.92% Smoking %: NR ETOH: NR Substance abuse %: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): obstetrician Medical care environment (community/private/public clinic or hospital): | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis: 40.37% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Merlob, 2009 ⁴⁵ Israel TIS Medium | Race %: NR Mean Age: Median Age NR SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%: NR | clinic Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): hospital | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Misri 2006 ⁴⁶ Canada PC-Clinic Medium | Race NR Mean Age: 32 years SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: 91% married, 9% common-law Smoking% ETOH: NR Substance abuse: NR | NR NR | NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Misri 2010 ⁴⁷ Canada PC-Clinic Medium | Race: 78% white, 0% AA, 0% Hispanic, 9% East Asian, 13% Other Mean Age: 32.5 years SES: Education=16.5 years Home situation: NR Unplanned pregnancy: NR Marital/partner status: 83% married, 15% common-law, 1% separated, 1% divorced Smoking NR ETOH NR Substance abuse NR | NR | NR |
| Mulder 2011 ⁴⁸ The Netherlands Prospective cohort/Data Source [PC] Medium | Race NR Mean Age: 31.5 (control vs. previously exposed vs. exposed) SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking:17.7% vs. 21.6% vs. 17.7% ETOH: 11.5% vs. 8.1% vs. 6.3% Substance abuse: NR | Mental health comorbidities Panic disorder: 9% Depression and panic combined: 46% Anxiety: 3% OCD: 1.5% Use of other psychoactive drugs % Provider characteristics: physician or mid wife Medical care environment: clinic | 38 % with diagnosis N=133 Family history of depressive/mood disorders: NR Prior use of antidepressive drugs NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| Nakhai-Pour, 2010 ⁴⁹ Canada CC Low | Race %: NR Mean Age: 27.52 SES: Recipients of social assistance: 30.90% Home situation: Urban Residences: 77.13% Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): Anxiety 6.79%, Bipolar 0.44% Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: 4.93% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Nordeng, 2012 ⁵⁰ Norway PBR Medium | Race: NR Mean Age: <20: 1.0%, 20-29: 44.2%, 30-39: 52.9%, >=40: 1.8% SES (education): primary: 3.0%, secondary: 35.4%, tertiary- short: 41.2%, tertiary- long: 20.3% Home situation: NR Unplanned pregnancy: NR Marital/partner status: Married/cohabiting: 96.5%, other: 3.5% Smoking: no: 89.9%, sometimes: 5.2%, daily: 5.0% ETOH: NR Substance abuse: NR | NR | Depressive symptoms at 17 gestational weeks: Nonexposed: 6.0% Prior-only: 22.1% Use of antidepressants during pregnancy: 39.9% Depressive symptoms at 30 gestational weeks: Nonexposed: 6.3% Prior-only: 22.1% Use of antidepressants during pregnancy: 38.4% Lifetime history of depression Nonexposed: 31.9% Prior-only: 86.8% Use of antidepressants during pregnancy: 88.7% Other characteristics NR |
| Nulman, 2002 ⁵¹ Canada PC Medium | Mean Age: 31.2 Socioeconomic status (Score on Hollingshead index of social status): 44.1 Other characteristics NR | Mental health comorbidities: tricyclic antidepressants were taken for pain control in 11 cases and for an anxiety disorder in 3 cases. Use of other psychoactive drugs: NR Provider characteristics: NR Medical care environment: NR | % with diagnosis: 100% Family history of depressive/mood disorders: NR Prior use of antidepressive drugs: NR Symptom severity (Mean [SD] Depression Score on CES-D Scale): 39.9 (11.3) fluoxetine, 28.0 (16.7) tricyclic antidepressants Duration of depression (Mean [SD]): 2.4 (0.5) years fluoxetine, 2.1 (1.0) years tricyclics Duration of treatment: (Mean [SD]): 1.9 (0.6) years fluoxetine, 1.8 (1.0) years tricyclics Time of diagnosis: NR Diagnosis method: Independent psychiatric evaluation |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Oberlander 2002 ⁵² Canada Prospective cohort/Data Source[PC] Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race NR Mean Age: NR SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking: NR ETOH: NR Substance abuse: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities NR Use of other psychoactive drugs: Clonazepam= 36% (N=14) Provider characteristics: NR Medical care environment: hospital | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms % with diagnosis NR Family history of depressive/mood disorders: NR Prior use of antidepressive drugs NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| Oberlander, 2006 ⁵³ Canada, British Columbia PBR Medium | Race %: NR Mean Age: 29.51 SES: Drugs subsidized through welfare program in years before becoming pregnant 0.06%, Income decile: 5.6 Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): Diagnosed with mental health disorder, excluding depression, in years before becoming pregnant: 0.6% Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (pcp, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: 14.5% -Family history of depressive/mood disorders (%):NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Oberlander, 2008 ⁵⁴ Canada, British Columbia PC Medium | Race %: NR Mean Age: 32.32 SES: Maternal education: 16.46 years Home situation: NR Unplanned pregnancy % Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): Excluded all other psychotropic or antidepressant medications Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Oberlander, 2008 ⁵⁵ (Birth Defects Res Part B) Canada, British Columbia PBR Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: NR Mean Age: 29 years SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis - Family history of depressive/mood disorders (%): NR - Prior use of antidepressive drugs (%, for treatment or prevention): NR - Symptom severity: NR - Time of diagnosis - Diagnosis method: NR - When treatment commenced relative to the onset of symptoms: NR |
| Okun, 2011 ⁵⁶ US, Ohio and Pennsylvania PC Medium | Race %: White 78.7%, AA 17.6%, Other 3.8% Mean Age: 29.9 SES: Employed 59.4%, Education: Less than high school 7.1%, High school 11.3%, Some college 20.0%, College 37.5%, Graduate school 24.2% Home situation: NR Unplanned pregnancy %: NR Marital/partner status: S 24.2%, Married/cohabitating 72.1%, Divorced/separated 3.3%, Widowed 0.4% Smoking%: 14.7% ETOH: 32.6% Substance abuse%: NR | hospital Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): community | Depression Characteristics: -% with diagnosis: 24.6% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Okun, 2012 ⁵⁷ US, Ohio and Pennsylvania PC Medium | Race %: White, 77.9% Mean Age: 30.1 SES: Employed, 59.3%; Education level: < high school 7.4%, high school 10.6%, some college 18.4%, college 40.1%, graduate school 23.5% Home situation: NR Unplanned pregnancy %: NR Marital/partner status: Married/Cohabitating 72.8% Smoking%: Ever during pregnancy 13.0%; No. cigarettes per day: 4.9±0.9 ETOH: Ever during pregnancy 30.8%; No. drinks per occasion: 2.3±2.1 Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (pcp, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: 24.44% -Family history of depressive/mood disorders (%):NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Palmsten 2012 ⁵⁸ Canada RC-LD Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race NR Median Age=30 years SES NR Home situation NR Unplanned pregnancy NR Marital/partner status NR Smoking NR ETOH NR Substance abuse NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities: % with other mental health disorder=3.9% Use of other psychoactive drugs: 0.93% anticonvulsant dispensing; 0.76% antipsychotic dispensing; 8.4% Provider characteristics: NR Medical care environment: NR | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms 100% with diagnosis Family history of depressive/mood disorders NR Prior use of antidepressive drugs: Total antidepressant days' supply in the years before the LMP=265; number of antidepressant classes used in the years before the LMP, 0=12%, 1=75%, 2=14%, 3-4=2% Symptom severity NR Time of diagnosis NR Diagnosis method NR When treatment commenced relative to the onset of symptoms NR |
| Pearson 2007 ⁵⁹ US, Louisiana Retrospective cohort Data/Source: [AD] Medium | Race NR Mean Age: 33 vs. 33 SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: 97% vs. 77% Married Smoking 24% vs. 54% ETOH NR Substance abuse: NR | Mental health comorbidities % 36% panic disorder 5% OCD 5% other anxiety disorders Use of other psychoactive drugs: 28.6% benzodiazepine (exposed) Provider characteristics: psychiatrist Medical care environment: hospital | 53.4% with diagnosis Family history of depressive/mood disorders: NR Prior use of antidepressive drugs (%, for treatment or prevention) NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: NR |
| Pedersen, 2009 ⁶⁰ Denmark PBD, LD Medium | "Women taking an SSRI were more likely to be older, living alone, unmarried and smokers." Data not shown. Others NR | Mental health comorbidities: NR Use of other psychotropic drugs: 1.2% for women with no recorded use of antidepressants, 16% in SSRI group use of TCA: n=42 (0.008%, Venlafaxine: n=91, 0.02%) | NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Pedersen, 2010 ⁶¹ Denmark PC Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: NR Mean Age: 29.81% SES: Education level: High: 55.75%, Middle: 34.07%, Low: 9.29% Home situation: Live with partner: 94.47%, Live alone: 5.53% Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: 47.35% ETOH: 40.60% Substance abuse%: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): excluded women taking psychotropic medications other than antidepressants Provider characteristics (pcp, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Rai 2013 ⁶² Sweden CC Low | Race NR Mean Age: 29.5 years SES: Family income highest 5th=21%, lowest 5th=16%; parental education > 12 years=49%, 10-12 years=48%, <9 years=7.3%; occupational class: higher professionals=19%, intermediate non-manual employees=20%, lower non-manual employees=15%, skilled manual workers=14%, unskilled manual workers=14%, self-employed=4.8%, unclassified=12% Home situation NR Unplanned pregnancy NR Marital/partner status NR Smoking NR ETOH NR Substance abuse NR | Mental health comorbidities: Anxiety disorder=6.2%, psychotic disorder=3.5%, other psychotic disorder=1.1% Use of other psychoactive drugs NR Provider characteristics NR Medical care environment NR | 0.06% with diagnosis Family history of depressive/mood disorders NR Prior use of antidepressive drugs NR Symptom severity NR Time of diagnosis NR Diagnosis method NR When treatment commenced relative to the onset of symptoms NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Ramos, 2008 ⁶³ Canada, Quebec LD Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: Questionnaire subgroup, N=806; White: 87.3%, Black: 1.9%, Other: 10.8% Mean Age: 28.3 SES: Welfare Recipient, 46.2% Home situation: Living alone, 29.8% Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: Questionnaire subgroup, 34.2% ETOH: Questionnaire subgroup, 19.7% Substance abuse%: Questionnaire subgroup, illicit drug use 6.82% | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): At least one anxiolytic/sedative prescription: 18.8% Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis: 25% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Ramos, 2010 ⁶⁴ Canada, Quebec LD, supplemental questionnaire Medium | Race %: NR Mean Age: 27.84 SES: Welfare recipient: 49.1%; Education Level >12y: 33.7% Home situation: Living Alone: 27.8% Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH:NR Substance abuse%: NR | Mental health comorbidities % (e.g. anxiety): Number of different psychiatric disorder diagnoses: ≤2: 59.9%, 3-5: 31.2%, >5: 8.9% Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): ≥1 anxiolytic or sedative prescription: 18.5%; ≥1 anticonvulsive prescription: 13.1% Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Rampono, 2009 ⁶⁵ Australia PC Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race: NR Median Age (range): 31 (24-37) SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking (during pregnancy): 11% ETOH (during pregnancy): 19.8% Substance abuse: Known substance abusers were excluded | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities: NR Use of other psychoactive drugs: NR Provider characteristics: NR Medical care environment: Outpatient clinics | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms NR |
| Reebye, 2002 ⁶⁶ Canada PC Medium | White: 88.5%, Asian: 9.8%, Other: 1.6% Mean age: 31.8 years M: 93.4%, S or D: 3.3% SES: NR Home situation: NR Unplanned pregnancy %: NR | Provider characteristics: Psychiatrist 14 patients taking SSRI + benzodiazepine Mental health comorbidity: NR | NR |
| Reis, 2010 ⁶⁷ Sweden PBR Medium | Race: NR Age: <20: 2%,20-24: 12%, 25-29: 27%, 30-34: 34%, 35-39: 20%, 40-44: 4.6%, >=45:0.2 % SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: 2% unknown, 85% co-habiting, 6% living alone, 6% other Smoking: 2% unknown, 74% no, 14% <10 cigarettes/day, 9% >=10 cigarettes/day ETOH: NR Substance abuse: NR | Mental health comorbidities: NR Use of other psychoactive drugs: 11% sedatives or hypnotics Provider characteristics: NR Medical care environment: NR | NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias Salisbury, 2011 ⁶⁸ US, Rhode Island PC Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: Hispanic 12.73%, Non-white 14.55% Mean Age: 29.3 SES: low SES 9.82% Home situation: NR Unplanned pregnancy %: NR Marital/partner status: not married: 34.23% Smoking%: 18.35% ETOH: 46.79% Substance abuse%: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (pcp, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): Hospital | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis: 50% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: 8.0 -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Salkeld 2008 ⁶⁹ Canada CC-LD Low | Race: NR Mean Age=26 years SES NR Home situation NR Unplanned pregnancy NR Marital/partner status: NR Smoking NR ETOH NR Substance abuse NR | NR | NR |
| Simon 2002 ⁷⁰ U.S. RC-HCDB Low | NR | Mental health comorbidities NR Use of other psychoactive drugs NR Provider characteristics NR Medical care environment: Primary care facilities owned by Group Health Cooperative | NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Sit, 2011 ⁷¹ US, Pennsylvania PC Medium | Race %: NR Mean Age: 31 SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: 23.8% ETOH: excluded women with alcohol abuse Substance abuse%: excluded women with substance abuse | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): Psychiatrist Medical care environment (community/private/public clinic or hospital): Clinic | Depression Characteristics: -% with diagnosis: 100% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: Structured Interview Guide for HAM-D Atypical Depression Symptoms, Mean=16.0±7.6 -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| Stephansson, 2013 ⁷² Sweden PBR Medium | Race: NR Mean Age: <=24: 16.3%, 25-34: 66.2%, 35-44: 17.4%, >=45: 0.1% SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking in early pregnancy: 78.1% no, 15.6% yes, 6.3% missing data ETOH: NR Substance abuse: NR | Mental health comorbidities: 3.9% had a previous psychiatric hospitalization Use of other psychoactive drugs: NR Provider characteristics: NR (stillbirth and neonatal mortality) Medical care environment: NR | NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Suri, 2007 ⁷³ US, California | Race %: NR Mean Age: 33.8y | Mental health comorbidities % (e.g. anxiety): NR | Depression Characteristics: -% with diagnosis: 78.5% |
| US, California PC Medium | Mean Age: 33.8y SES: College degree 87% Home situation: NR Unplanned pregnancy %: NR Marital/partner status: Married 90% Smoking%: 2.2% ETOH: 2.2% Substance abuse%: NR | anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): obstetrics, psychiatric Medical care environment (community/private/public clinic or hospital): clinic Depression Characteristics: -% with diagnosis: 78.5% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR | -% with diagnosis: 78.5% -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: HAM-D: Maximum 21 -item score M=17.2, Maximum 28-item score M=23.5; Maximum Beck Depression Inventory score M=9.8; Maximum Perceived Stress Scale M=9.3 -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |
| | | -Symptom severity: HAM-D: Maximum 21 - item score M=17.2, Maximum 28-item score M=23.5; Maximum Beck Depression Inventory score M=9.8; Maximum Perceived Stress Scale M=9.3 -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR | |

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| | Population Characteristics | | O Daniel and Ohamari I ii |
| Author Year Country Study Design/Data Source Risk of Bias Suri, 2011 ⁷⁴ US, California PC Medium | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race %: NR Mean Age: 334.84% SES: Education, M=17.57y Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%: NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms Depression Characteristics: -% with diagnosis: lifetime diagnosis 76.6% -Family history of depressive/mood disorders (%): NR - Prior use of antidepressive drugs (%, for treatment or prevention): NR - Symptom severity: Hamilton Depression Rating Scale, M=9 |
| Toh, 2009 ⁷⁵ US CC Medium | Race: 72.6% white, 6.9% black, 13.2 % Hispanic, 7.3% other Mean Age: <25: 18.9%, 25-29: 23.2%, 30-34: 35.5%, >=35: 21.9% Socioeconomic status: Education (years): <=12: 26.7%, 13-15: 24.1%, >15: 49.2% Home situation: NR Unplanned pregnancy: NR Married or living with child's partner: 89.7% Smoking during pregnancy: Never: 59.1%, past smoker: 25.5%, <10 per day: | (community/private/public clinic or hospital): clinic Mental health comorbidities: NR Use of other psychoactive drugs: 0.8% Provider characteristics: NR Medical care environment: Various (hospitals, clinics, PICUs) | NR |
| | 7.9%, >=10 per day: 8.5% ETOH during pregnancy: Never: 45.7%, past drinker: 50.3%, drank: 3.3% Substance abuse: NR | | |
| Ververs, 2009 ⁷⁶ the Netherlands AD Medium | Race %: NR Mean Age: 30.3 years SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: NR Smoking%: NR ETOH: NR Substance abuse%:NR | Mental health comorbidities % (e.g. anxiety): NR Use of other psychoactive drugs % (antipsychotics, antianxiety agents (e.g., benzodiazepines), and drugs for insomnia): NR Provider characteristics (primary care physician, obstetrician, psychiatrist, nurse, midwife, community worker, or pediatrician visits): NR Medical care environment (community/private/public clinic or hospital): NR | Depression Characteristics: -% with diagnosis: NR -Family history of depressive/mood disorders (%): NR -Prior use of antidepressive drugs (%, for treatment or prevention): NR -Symptom severity: NR -Time of diagnosis: NR -Diagnosis method: NR -When treatment commenced relative to the onset of symptoms: NR |

| | Population Characteristics | | |
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| Author Year Country Study Design/Data Source Risk of Bias | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms |
| Wen 2006 ⁷⁷ | Race: NR | NR | NR |
| Canada RC, PBD Medium | Age: <19: 7.6%, 20-29: 55.3%, ≥30: 37.1% Social assistance: 14.6% Home situation: NR Unplanned pregnancy: NR Smoking %: NR ETOH: NR Substance abuse: 0.7% | | |
| Wilson, 2011 ⁷⁸ US CC Medium | Race: NR Advanced maternal age (>=35): 10% SES: NR Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking (tobacco use yes): 7.1% ETOH: NR Substance abuse: NR | Mental health comorbidities: NR Use of other psychoactive drugs: NR Provider characteristics: NR Medical care environment: Army Medical Center | NR |
| Wisner, 2009 ⁷⁹ | Race: 67% white, 12% AA, 2% Other | NR | % with diagnosis: 100% |
| US, Ohio Prospective cohort Medium | Mean Age: 39% < 31 years, 41% > 31 years SES: NR Home situation: NR Unplanned pregnancy %: NR Marital/partner status: 64% Married/partner | | Family history of depressive/mood disorders (%): NR Prior use of antidepressive drugs (%, for treatment or prevention): NR Symptom severity: HAM-D 17: 4.9 (range across groups 4.2 - 14.9). Time of diagnosis: baseline Diagnosis method: HAM-D 17, Structured Interview Guide for the Hamilton Depression Rating Scale With Atypical Depression Supplement, GAS, SF-12 Mental Component When treatment commenced relative to the onset of symptoms: NR |
| Wogelius, 2006 ⁸⁰ Denmark PBR Medium | Age: <25: 13%, 25-30: 46%, >30: 42.1% Smoking: 24.2% smokers Other characteristics NR | Mental health comorbidities: NR Use of other psychoactive drugs: NR Provider characteristics: NR Medical care environment: NR | NR |

| | Population Characteristics | | |
|---|--|--|---|
| Author Year Country Study Design/Data Source Risk of Bias Yonkers 2012 ⁸¹ US Prospective Cohort [PC] Low | 1. Race % Mean Age Socioeconomic Status Home Situation Unplanned Pregnancy % Marital/Partner Status Smoking % ETOH Substance Abuse % Race 74% White 7% Black 14% Hispanic,5% Other Mean Age: 31 SES: Education (years) <12, 6% 12, 14% 13-15, 23% 16+, 57% Home situation: NR Unplanned pregnancy: NR Marital/partner status: NR Smoking 15% ETOH NR | 2. Mental Health Comorbidities % Use of Other Psychoactive Drugs % Provider Characteristics Medical Care Environment Mental health comorbidities % PDSD 5% Anxiety 10% Panic disorder 4% Use of other psychoactive drugs % Provider characteristics: obstetrician:clinic or hospital | 3. Depression Characteristics: - Percent with Diagnosis - Family History of Depressive/Mood Disorders (%) - Prior Use of Antidepressive Drugs (%, for Treatment or Prevention) - Symptom Severity - Time of Diagnosis - Diagnosis Method - When Treatment Commenced Relative to the Onset of Symptoms 100% with diagnosis Family history of depressive/mood disorders: NR Prior use of antidepressive drugs (%, for treatment or prevention) NR Symptom severity: NR Time of diagnosis: NR Diagnosis method: DSM-IV and screened positive for depressive episode and antidepressant treatment. |
| Zeskind 2004 ⁸² US | Substance abuse 8% Race: 94% white Mean Age: 33 years (1.36) | Mental health comorbidities NR Use of other psychoactive drugs NR | 100% with diagnosis Family history of depressive/mood disorders: |
| Prospective cohort | Low socio economic status: N=3 | Provider characteristics NR | NR |
| study/Data Source [PC, | Home situation: NR | Medical care environment NR | Prior use of antidepressive drugs (%, for |
| AD] | Unplanned pregnancy: NR | Wedical care criviloriment raix | treatment or prevention) NR |
| , 10] | Marital/partner status: NR | | Symptom severity: NR |
| Medium | Smoking% | | Time of diagnosis: NR |
| McGiaiii | ETOH: 70% | | Diagnosis method: NR |
| | | | |

| Author, year Country Study Design/Data Source Risk of Bias | 4. Exposures (N, duration, dose) Controls (N) | 5. Exposure Period | 6. Confounders |
|---|--|--|--|
| Alwan 2007 ¹ US Arm of Case Control Studied, Population based Medium | Fluoxetine, Sertraline, Paroxetine. Duration: 1 month before pg-3 month after conception | 1 month before pg - 3 month after conception | Maternal race, obesity, maternal smoking, family income |
| Alwan 2010 ² Canada Case-control/Data Source[CC] Medium | Bupropion N = 90 Cases: N=64 Controls: N=26 Duration NR Unexposed N = 17353 Cases: N=11,733 Controls: N=5626 | Between 1 month before and 3 months after conception. | Adjusted for maternal age, maternal race, maternal education, maternal obesity before pregnancy (body mass index 30 kg/m2, 30 kg/m2), maternal smoking and alcohol use from1 month before to 3 months after conception, use of a dietary supplement containing folic acid from 1 month before to 1 month after conception, annual family income plurality, and parity. |
| Andrade, 2009 ³ US Retrospective Cohort/Data Source [AD] Medium | Average daily doses of sertraline, fluoxetine, and paroxetine were 113.2 \pm 72.3 mg, 20 \pm 11.9 mg, and 17.2 \pm 10.1 mg | Third trimester exposure | None adjusted for (Data NA) |
| Bakker 2010 ⁴ CC/PBD Netherlands Medium | Paroxetine (N = 6, T1) Controls (N=605) | T1 | Year of birth |
| Bakker 2010 ⁵ The Netherlands Case-Control Medium | Exposure=Paroxetine; dose and duration NR Cases N=678 Controls N=615 | First trimester: Any use from 4 weeks before conception through the 12th week of pregnancy | Adjusted for year of birth, pregnancy outcome, maternal age, gravidity, mother's educational level, smoking, use of alcohol, BMI, folic acid use, and pre-existing maternal diabetes or epilepsy |
| Ban, 2012 ⁶ U.K. PBD Medium | N= all pregnancies Exposure TCA: N=3019 SSRI:N= 10312 Control: No history N= 390665, unmedicated mental illness: N= 3647 | First trimester | Maternal age at the end of pregnancy, most recent recording of smoking status before delivery, BMI before pregnancy and quintiles of Townsend's Index of Deprivation for each woman's postcode of residence, no. of previous known live births for each pregnancy |

| Author, year | | | |
|----------------------------|---|--|---|
| Country | | | |
| Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Berard, 2007 ⁷ | Paroxetine (N=542) | First trimester: 0-14 weeks of GA | Adjusted for antidepressant exposure during |
| Canada, Quebec | Dose, M=22.4mg±9.0 | | the second and third trimesters, GA, |
| LD | Duration, M=64d±2.3 | | maternal age, mean number of prenatal |
| Medium | | | visits, visits to an obstetrician during |
| | Other SSRI (N=443) | | pregnancy, pregnancy in the year before this |
| | Dose, Duration, NR | | pregnancy, diagnosis of diabetes, |
| | Sertraline, n=186 | | hypertension and depression in the year |
| | Citalopram, n=113 | | before or during pregnancy, place of |
| | Fluoxetine, n=101 | | residence, living alone, welfare status, |
| | Fluvoxamine, n=43 | | calendar year, mean number of physician |
| | | | visits in year before pregnancy, number of |
| | Non-SSRI antidepressants (Control Group) (N=293) | | different medications excluding |
| | Dose, Duration, NR | | antidepressants, number of different |
| | Venlafaxine, n=153 | | prescribers in year before and during |
| | Amitriptyline, n=140 | | pregnancy. |
| Bogen 2010/companion Wen | Physically healthy but taking antidepressant during pregnancy for MDD | Pregnancy to 2 years postpartum | Women's prior breast feeding experience, |
| 2009 ⁸ U.S. | , n=38 (SSRI), n=4 SRI, n=1 (bupropion), duration: N MDD during | | maternal age, race, marital statu, smoking, |
| PC | pregnancy but no gestational antidepressant exposure, N=NR | | maternal obesity, SRI use |
| Boucher, 2008 ⁹ | No current psychiatric disorder and no antidepressant, N=NR Exposed: N=73 (22 citalopram, 19 paroxetine, 10 sertraline, 4 | Late pregnancy (last 3 weeks of pregnancy) | Gestational age at birth, maternal age and |
| Canada | fluoxetine, 2 fluvoxamine, 12 venlafaxine, 3 amitriptyline, 3 trazodone, | Late pregnancy (last 3 weeks of pregnancy) | other medications taken by the mother. |
| LD | 1 mirtazapine) | | other medications taken by the mother. |
| Medium | Duration NR | | |
| Wediam | Buldion WC | | |
| | Controls: N=73 | | |
| Casper 2003 ¹⁰ | Any SSRI, | 71% before or during pregnancy | Adjusted for age at delivery, marital status, |
| US, California | N = 31 | 45% throughout | years of schooling, |
| Cohort study | 23% fluoxetine, 26%paroxetine, 3.2% fluvoxamine | 71% first trimester | parity, weight gain, and self-rated levels of |
| Data/Source: [CC] | | 74% third trimester | depression |
| Medium | Duration: | 29% after delivery | |
| | Throughout: N=13 | | |
| | First trimester: N=22 | | |
| | Third trimester: N=23 | | |
| | Dose: | | |
| | average daily doses | | |
| | sertraline 113.2 ± 72.3 mg, fluoxetine 20 ± 11.9 mg, | | |
| | paroxetine 17.2 ± 10.1 mg | | |
| | Control: Unoversed | | |
| | Control: Unexposed N = 13 | | |
| | IN = 10 | | |

| Author, year | | | |
|-------------------------------------|---|---|--|
| Country Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Chambers, 1996 ¹¹ | Controls (N=223) | At study entry, through: | Adjusted for multiparity, previous |
| US, California | | | spontaneous abortion, preeclampsia, |
| CC | Fluoxetine, N=173 | Exposed Early group: | eclampsia, hypertension, smoking status, |
| Medium | Dose M= 26.73 | 93% discontinued in first trimester | maternal age, SES, race, average dose of |
| | Duration: NR | 7% first and second trimester | fluoxetine, gestational diabetes, use of other |
| | | | psychotherapeutic drugs, alcohol use, |
| | | Exposed Late group: | evidence of maternal age, SES, race, |
| | | 82.2% first, second third trimester 9.6% second and third trimester | average dose of fluoxetine, gestational |
| | | 5.5% third trimester only | diabetes, use of other psychotherapeutic drugs, alcohol use, evidence of maternal or |
| | | 2.7% first and third trimester only | neonatal infection near delivery, prematurity, |
| | | 2.7 % ill'st and tillid tilliester only | mode of delivery. |
| Chambers, 2006 ¹² | Cases N= 377 (16 SSRI, 4 other antidepressant) | Before week 20 (n=32) | Single or multiple pregnancy, maternal |
| US | Controls: N= 836 (24 SSRI, 13 other antidepressant) | After week 20 (n=25) | diabetes, maternal smoking, maternal |
| CC | Duration NR | | alcohol use, maternal NSAID use after week |
| Medium | | | 20. |
| Cole 2007 ¹³ | Paroxetine vs. other antidepressants* | First trimester. | Adjusted for all of the covariates |
| US | Monotherapy N = 791 | | derived from the medical and pharmacy |
| Case-control/Data Source[AD] | Mono or Polytherapy: N=989 | | claims data and indicators for paroxetine |
| Low | Other antidepressants: Monotherapy N = 4072 | | exposure, maternal age category, geographic region of the |
| | Mono or Poly therapy: N=4767 | | health plan, and |
| | Duration NR | | infant sex. |
| | Bulation Wix | | illiant sex. |
| | Control: Exposed to other antidepressants | | |
| | N = 4767 (mono or poly) and 4072 (monotherapy) | | |
| | | | |
| | * including selective serotonin reuptake inhibitors, selective | | |
| | norepinephrine reuptake inhibitors, serotonin-2 antagonist reuptake | | |
| | inhibitors, tricyclics, and monoamine oxidase inhibitors) | | |
| Cole, 2007 ¹⁴ | Exposed: N=1213 bupropion, 4743 other antidepressant | 1st trimester | Diagnoses of bipolar disorder and eclampsia |
| US | Controls: N=1049 (bupropion outside first trimester) | Tot tilliootol | within 1 year before delivery, dispensing of |
| LD | Commission (Supropromounds mot amount) | | lithium, phenytoin, and fluconazole within 1 |
| Medium | | | year before delivery through the end of the |
| | | | 1st trimester, and the number of physician |
| | | | visits within 10-12 months before delivery; |
| | | | maternal age, geographic region of the |
| | | | health plan, and infant sex. |

| Author, year | | | |
|--------------------------------|--|--|---|
| Country | 4- 44 4 4 | | |
| Study Design/Data Source | 4. Exposures (N, duration, dose) | 5 Francisco Boried | C Comfoundance |
| Risk of Bias | Controls (N) | 5. Exposure Period T1:Trimester 1 | 6. Confounders |
| Colvin 2012 ¹⁵ | Any SSRI: citalopram, paroxetine, sertraline, fluoxetine, escitalopram, | 11:1 rimester 1 | Preterm birth (<37 Weeks) was adjusted for |
| PBD/CC Australia | fluvoxamine (N=3764, varies) | T2 or T2. Trimostor 2 or 2 only | previous preterm birth, smoked during |
| Medium | Controls (N=94,561) | T2 or T3: Trimester 2 or 3 only | pregnancy, SEIFA, parity, maternal age; singletons only |
| Wedium | | Any: Any time during pregnancy | Singletons only |
| | | Any. Any time during pregnancy | Birth weight (<2500g) was adjusted for |
| | | | gestational age, smoking during pregnancy, |
| | | | SEIFA, sex, parity, maternal height; |
| | | | singletons only |
| Croen, 2011 ¹⁶ | SSRIs (N=49) | Preconception: 3 months prior to LMP | Adjusted for age, race/ethnicity, education of |
| US, California | citalopram, fluoxetine, fluvoxamine, paroxetine, sertraline | | mother, birth weight, sex, birth year, birth |
| CC | | First trimester: first 90 days after LMP | facility |
| Medium | Dual-action antidepressants (N=10) nefazodone, trazodone, | | |
| | venlafaxine, | Second trimester: 91-180 days after LMP | |
| | serotonin-noradrenergic-reuptake | | |
| | inhibitors, noradrenergic and specific serotoninergic antidepressants, | Third trimester; 181 days after LMP to date of | |
| | and noradrenaline-reuptake inhibitors | delivery | |
| | Triovalia antidomenana to (NI=22) anaitriat dina danimanania adayania | | |
| | Tricyclic antidepressants (N=22) amitriptyline, desipramine, doxepin, imipramine, nortriptyline, protriptyline | | |
| | impramine, normprynne, promptynne | | |
| | SSRIs only, N=38 | | |
| | SSRIs + tricyclic antidepressants or dual-action antidepressants, N=11 | | |
| Davidson, 2009 ¹⁷ | Controls (N=20) | Entire pregnancy | Groups matched for gestational age. |
| Israel | Paroxetine (N=8) | | Excluded from study: Diabetes, chronic |
| CC | Fluoxetine (N=7) | | hypertension, CV disease. |
| Medium | Citalopram (N=6) | | |
| Davis, 2007 ¹⁸ | Assessing congenital anomalies: | Assessing congenital anomalies: First | Unadjusted |
| US | Tricyclic Antidepressants (N=221) | trimester exposure | |
| LD | SSRIs (N=1047) | | |
| Medium | Other antidepressants (N=173) | Assessing perinatal complications: Third | |
| | Non-exposed (N=49,663) | trimester exposure | |
| | | | |
| | Accessing perinatal complications: | | |
| | Assessing perinatal complications: Tricyclic Antidepressants (N=339) | | |
| | SSRIs (N=1602) | | |
| | Other antidepressants (N=260) | | |
| | Nonexposed (N=75,833) | | |
| Dubnov-Raz, 2008 ¹⁹ | Controls (N=52) | NR, women were taking SSRI at onset of labor | Excluded gestational diabetes and |
| Israel | Paroxetine (N=25), Citalopram (N=13), Fluoxetine (N=12), | , | hypothyroidism |
| CC | Fluvoxamine (N=1), Venlafaxine (N=1), duration and doses NR | | |
| Medium | | | |

| Author, year Country Study Design/Data Source Risk of Bias Dubnov-Raz, 2012 ²⁰ Israel CC | 4. Exposures (N, duration, dose) Controls (N) SSRI (N=40); High dose: fluoxetine, citalopram ≥ 40mg/day, escitalopram ≥20mg/day; Duration: 92.5% throughout entire pregnancy | 5. Exposure Period Throughout pregnancy | 6. Confounders Adjusted for maternal age, maternal smoking status, previous births, GA, infant sex, birth weight z-score, birth length |
|---|---|---|--|
| Medium El Marroun 2012 ²¹ | Controls (N=40) SSRIs during pregnancy N=99,1.3% | First trimester only, N=47 | Adjusted for BMI, educational |
| Netherlands Prospective Cohort*Data Source [PC and PD] Low | Duration NR Control: Unexposed (with low depressive symptoms) N=7027, 91.3% | First trimester plus 1 additional trimester, N=52 | level, maternal smoking habits, maternal age, ethnicity, fetal sex, parity, and maternal use of benzodiazepines, but not maternal drinking habits and cannabis. For effects of depressive symptoms and SSRI use on head growth also adjusted for fetal body size measures. |
| Ferreira 2007 ²² US Retrospective Cohort/Data Source[AD] Medium | Exposed to SSRIs or venlafaxine: N=76 46 (60.5%) paroxetine (5–40 mg) 10 (13.2%) fluoxetine (10–40 mg) 9 (11.8%) venlafaxine (75–150 mg) 6 (8%) citalopram (10–30 mg), 3 (3.9%) sertraline (125–150 mg), 2 (2.6%) fluvoxamine (50–150 mg) Mean duration SSRIs: 32 months (range: | Third trimester or at least two weeks prior to delivery | Adjusted for prematurity, maternal age 35 years, smoking, illicit drug use, cesarean section, maternal hypertension, prolonged preterm rupture of membranes, history of prematurity, history of 2 miscarriages, gestational diabetes, and small for gestational age. |
| | 1–132 months) Controls: Unexposed N= 90 | | |

| Author, year | | | |
|---|--|--|--|
| Country | | | |
| Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Figueroa 2010 ²³ US Retrospective cohort Design/Data Source[AD] Medium | Controls (N) SSRI before pregnancy N=954 2.51% SSRI during pregnancy N=916 2.41% First trimester N=564 1.48% Second trimester N=564 1.18% Third trimester N=564 1.48% SSRI after pregnancy N=1,948 5.12% Bupropion before pregnancy N=165 0.43% Bupropion during pregnancy N=114 0.30% First trimester N=79 0.21 % Second trimester N=46 0.12% Third trimester N=7 0.10% Bupropion after pregnancy N=185 0.49% Other antidepressant during pregnancy N=119 0.31% | Before pregnancy First trimester Second trimester Third trimester Throughout | Adjusted for maternal and paternal mental health diagnoses, presence or absence of maternal mental health-related visits by period of time (year of child's life), use of other psychotropics during pregnancy, and perinatal complications. |
| Gorman, 2012 ²⁴ US, California Prospective cohort/TIS Medium | Dose: NR Controls: Unexposed N=168 Any SSRI Exposure before delivery: 117 Exposures at delivery: 197 Unexposed: 182 | Means: Exposed early: 12 weeks Exposed at deliver: 33 weeks | Maternal age, SES category, and race/ethnicity, maternal characteristics, reproductive history, (any alcohol use in pregnancy, cesarean birth, and low 5-minute |
| Grzeskowiak 2012 ²⁵ Australia Retrospective cohort/LD Medium | SSRI use N=221 Psychiatric illness/no SSRI use N=1566 No psychiatric illness N=32,004 | Late gestation=Definition NR | Apgar scores and birth characteristics Preterm delivery adjusted for maternal age, socioeconomic status, smoking status, race, asthma, preexisting diabetes, alcohol abuse, substance abuse, hypertension, parity, epilepsy, thyroid disorder, previous history of premature delivery, and anxiolytic use |
| 26 | | | Low birth weight adjusted for same as preterm delivery plus maternal H4-SGA, neonate admitted to hospital, neonate length of hospital stay > 3 days adjusted for maternal age, socioeconomic status, smoking status, race, asthma, preexisting diabetes, alcohol abuse, substance abuse, hypertension, parity, epilepsy, thyroid disorder, and anxiolytic use. |
| Heikkinen, 2002 ²⁶ Finland PC | Exposure: Citalopram 20-40mg QD, n=11, duration: NR Controls: n=10 | During pregnancy up to 1 year | age, gravidity, parity, time and mode of delivery |

| Author, year Country Study Design/Data Source Risk of Bias Jimenez-Solem 2012 ²⁷ Denmark | 4. Exposures (N, duration, dose) Controls (N) Any SSRI, dose and duration NR | 5. Exposure Period First trimester: Between ≥1 month before conception and day 84 | Confounders Adjusted for mother's age, parity, income, education, smoking and year of conception. |
|---|--|--|---|
| RC-PD Low | First trimester exposure N=4183 Paused during pregnancy N=806 Unexposed N=843,797 | Paused exposure: No exposure between 3 months before conception and 1 month after giving birth | SSRI, selective serotonin reuptake inhibitor |
| Jimenez-Solem, 2013 ²⁸ Denmark PBR Low | Exposed: N=6,378 (2,434 fluoxetine, 1,800 citalopram, 212 escitalopram, 734 paroxetine, 1,654 sertraline) Unexposed: N=908,214 | 1st trimester (n=3982) 1st and 2nd trimesters (n=2065) All trimesters: (n=6,378) | Smoking, birth year, prior stillbirths, mother's age, annual household income, education level, parity, |
| Jordan 2008 ²⁹ US Clinic Appt Logs, Pediatrics records review AD Medium | SRI Any N=49. Duration NR; controls= unexposed AND discontinued last month of pregnancy | NR | Analyzed 3 pregnancies with benzodiazepines separately |
| Kallen, 2004 ³⁰ Sweden PBR Medium | SSRI (N=558): Citalopram, n=285 Paroxetine, n=106 Fluoxetine, n=91 Sertraline, n=77 Other antidepressants (N=63) Venlafaxine, n=24 | Throughout pregnancy; weeks of pregnancy NR, n=387 drug stopped before week 24, n=70 drug started or continued past week 23, n=561 | Adjusted for year of birth, maternal age, parity, and maternal smoking in early pregnancy |
| Kallen 2007 ³¹ Sweden Retrospective cohort/Data Source[PBR] Medium | Exposed SSRIs N = 6,481, 96.5% only one SSRI Fluoxetine N=860 Citalopram N=2,579 Paroxetine N=908 Sertraline N=1,807 Fluvoxamine N=36 Escitalopram N= 66 | First trimester | Adjusted for maternal age, parity, smoking, previous miscarriage, BMI, years of subfertility and maternal country of birth. |
| | | | |

| Author, year | | | |
|---|---|---|--|
| Country | | | |
| Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Kallen 2008 ³² Sweden Unclear/Data Source[PBR] Medium | Exposed: N= 7587 SSRIs: 39% Citalopram 31% Sertraline 15% Fluoxetine 13% Paroxetine 2% Fluvoxamine or escitalopram Dose: NR Controls: All other registered births N= 831,324 Other: Mirtazapine N=1 | First trimester, some late exposure | Adjusted for maternal age, parity, BMI, and smoking. |
| Kieler 2012 ³³ Nordic countries Retrospective cohort, PBD Medium | Any SSRI, fluoxetine, citalopram, paroxetine, sertraline, or escitalopram N = 2145 Duration NR Control: Unexposed N = 2300 | Ever: 3 months before pregnancy until birth Early: 3 months before pregnancy until pregnancy length of 55 days Late: From 140 days after the start of pregnancy until birth | Adjusted for maternal age, dispensed non- steroidal anti-inflammatory drugs and anti diabetes drugs, pre-eclampsia, chronic diseases during pregnancy, country of birth, birth year, level of delivery hospital and birth order |
| Kornum, 2010 ³⁴ Denmark PBR Medium | No SSRI (N= 213,049) Any SSRI (N= 2,993, duration and dose NR) | Early: From 30 days prior to conception to the end of the first trimester Second/Third month.: During the second or third month of pregnancy | Excluded from study: Antiepileptics within 90 days prior to conception or during first trimester Antidiabetic drugs at any time prior to conception or during pregnancy |
| Laina 2002 ³⁵ | CCDIa Citalanaan Fluoratian | During and and loadsting | ORs adjusted for maternal smoking status, maternal age, birth order and birth year. |
| Laine 2003 ³⁵ Finland Prospective cohort/Data Source[PC] Medium | SSRIs: Citalopram, Fluoxetine N = 20 Duration: exposure during pregnancy ranged from 7- 41 weeks Dose: mean (range) Citalopram: 20mg (20-40) Fluoxetine: 20mg (20-40) Control: Unexposed | During pregnancy and lactation | Adjustment NR Controls matched age, gravidity, parity, duration of pregnancy and time and mode of delivery. |
| | Control: Unexposed N = 20 | | |

| Author, year Country | | | |
|--------------------------------------|---|---|--|
| Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Latendresse, 2011 ³⁶ | Total N: exposed and non exposed: 100 | NR | Pregnancy related anxiety, corticotropin |
| U.S. | SSRI: n. dose and duration: NR | | releasing hormone and SSRI use for |
| PS | Control: Unexposed patients, n, dose, duration NR | | depression and anxiety, age, antepartum |
| Medium | , | | complications (including previous history of |
| | | | Pre-term birth |
| Lennestal, 2007 ³⁷ | SNRI Use (N=732) | Throughout pregnancy; "Early" exposure: | Adjusted for year of delivery, maternal age, |
| Sweden | Mianserin, n=61 | maternal use of the drug prior to first antenatal | parity, and smoking in early pregnancy, BMI |
| PBR | Mirtazapine, n=144 | care visit (usually near end of first trimester) | class |
| Medium | Venlafaxine, n=501 | "Late" exposure: maternal use of the drug after | |
| | Reboxetine, n=14 | the "early" exposure period. | |
| | Venlafaxine + mirtazapine, n=9 | | |
| | Venlafaxine + mianserin or reboxetine, n=3 | | |
| | SSRI Use comparison group (N=6481) | | |
| | No. women in register, controls (N=860,215) | | |
| | Doses, durations NR | | |
| Levinson-Castiel, 2006 ³⁸ | SSRIs (n=60)N, dose range: paroxetine:37, 10-40mg; fluoxetine:12, | during entire pregnancy or at least during the | Adjusted for sex, gestational age (±1 wk), |
| Israel | 20-60mg; citalopram: 8,10-40mg; venlafaxine:2, 37.5-75mg | third trimester | birth weight, mode of delivery |
| PC, PBD | | | |
| Medium | Duration, mean, SD, wks: 35.5 (8.7) | | |
| | Control-non-SSRI exposed neonates: n=60 | | |
| Lewis 2010 ³⁹ | Medication group N=27 | NR | No adjustment for confounders |
| Australia | Control group N=27 | | |
| PC-Clinic | | | |
| Medium | Types, doses, duration NR | | |
| Logsdon, 2011 ⁴⁰ | Control (no SSRI, no MDD): N=144 | NR | Excluded from study: active substance |
| US, Pennsylvania | Responder (SSRI, no MDD): N=48 | | abuse, benzodiazepines, prescription drugs |
| PC | Untreated (MDD, no SSRI): N=12 | | in FDA-defined categories of D or X. |
| Medium | Nonresponder (Both MDD and SSRI): N=11 | | |
| Louik 2007 ⁴¹ | Exposed: infants exposed to any SSRI (fluoxetine, sertraline, | First trimester-exposure to any SSRI from 28 | Maternal age, maternal race or ethnic group |
| US | paroxetine, citalopram, non-SSRI antidepressant) n=9849 | days before the last menstrual period through | (self reported), maternal education, year or |
| CC | | the fourth lunar month (112 days after the last | last menstrual period, parity, study center, |
| | Control: infants without birth defects, n=5860 | menstrual period) | first-trimester smoking, first-trimester alcohol |
| | Dose and duration NR | | consumption, history of a birth defect in first |
| | | | degree relative, pre pregnant BMI, seizures, |
| | | | diabetes mellitus, hypertension, infertility, first trimester use of folic acid. |
| Lund. 2009 ⁴² | SSRI, N=329, duration and dose NR | NR | Parity, maternal age, BMI, smoking habit, |
| Denmark | Control: Psychiatric history, no SSRI use: 4902 | · · · | alcohol intake, marital status, education |
| PC | Control, No psychiatric history, no SSRI use: 51770 | | |
| · - | | 1 | |

| Author, year | | | |
|-------------------------------|---|--|--|
| Country | | | |
| Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Malm, 2011 ⁴³ | SSRI (N=6,881, duration and dose NR) | 1 month prior to pregnancy or during the first | Adjusted for maternal age at end of |
| Finland | No SSRI (N=618,727, duration and dose NR) | trimester | pregnancy, parity, year of pregnancy ending, |
| TIS | | | marital status, smoking during pregnancy, |
| Low | | | purchase of other reimbursed psychiatric |
| | | | drugs during the first trimester, maternal |
| | | | prepregnancy diabetes. |
| McFarland, 2011 ⁴⁴ | Dose and duration NR | During pregnancy | Excluded Axis I diagnosis |
| US, Rhode Island | MDD | | |
| PC | SRI (N=37) | | Women with current anxiety disorder |
| Medium | No SRI (N=28) | | diagnosis or PTSD were included in MDD |
| | | | and non-MDD groups |
| | Non-MDI | | |
| | SRI (N=15) | | |
| | No SRI (81) | - | |
| Merlob, 2009 ⁴⁵ | SSRI (N=235, duration and dose NR) | First-trimester exposure | Excluded chromosomal defects |
| Israel | No-SSRI (67,636, duration and dose NR) | | |
| TIS | | | |
| Medium | 000 | | |
| Misri 2006 ⁴⁶ | SSRIs only (N=13) | During pregnancy and breastfeeding | Depression, anxiety |
| Canada | During Pregnancy: | | |
| PC-Clinic | Fluoxetine 20.00 mg | | |
| Medium | Paroxetine 23.57 mg Sertraline 91.67 mg | | |
| | Duration: 191 days | | |
| | During breastfeeding: | | |
| | Fluoxetine 26.67 mg | | |
| | Paroxetine 27.50 mg | | |
| | Sertraline 91.67 mg | | |
| | Duration: 59.46 days | | |
| | 2 didition corre days | | |
| | SSRIs plus clonazepam (N=9) | | |
| | During Pregnancy: | | |
| | Fluoxetine 15.00 mg | | |
| | Paroxetine 23.57 mg | | |
| | SSRI Duration: 167.78 days | | |
| | Clonazepam dose/duration: 0.67 mg/136.63 days | | |
| | During breastfeeding: | | |
| | Fluoxetine 26.56 mg | | |
| | Paroxetine 15.00 mg | | |
| | Sertraline 28.57 mg | | |
| | Duration: 60.13 days | | |
| | Clonazepam dose/duration: 0.71 mg/41.22 days | | |

| Author, year Country Study Design/Data Source Risk of Bias Misri 2010 ⁴⁷ | 4. Exposures (N, duration, dose) Controls (N) | 5. Exposure Period | 6. Confounders |
|---|---|---|---|
| Misri 2010** Canada PC-Clinic Medium | Depressed and treated with antidepressants N=39 Individual drugs, % patients, mean dosages: Fluoxetine: 17%, 3.14 mg Paroxetine: 44%, 25.6 mg Sertraline: 15%, 91.7 mg Citalopram: 17%, 57.3 mg Venlafaxine: 7%, 87.5 mg days on SSRIs and/or SNRIs=222 Exposed to SSRIs and/or SNRIs at 3-month visit=26% and 6-month visit=11% Depressed and not treated with antidepressants, N=13 Not depressed and not treated with antidepressants | NR | NR |
| Mulder 2011 ⁴⁸ The Netherlands Prospective cohort/Data Source[PC] Medium | Exposed N=96, previously exposed N=37 44% paroxetine, 21% fluoxetine, 20% citalopram, 7% venlafaxine, 4% fluvoxamine, 4%sertraline median mDDD: 1 (range 0.2–3.0 mDDD) Duration: 6 months Control: Unexposed N = 130 | Throughout pregnancy | Adjusted for fetal behavioral states and gestation. |
| Nakhai-Pour, 2010 ⁴⁹ Canada CC Low | Exposures: Selective Serotonin Reuptake Inhibitors (SSRI): citalopram, fluoxetine, fluvoxamine, paroxetine, sertraline; Tricyclic Antidepressants: amitriptyline, desipramine, imipramine, nortriptyline; Serotonin-norepinephrine reuptake inhibitors: venlafaxine; Serotonin modulators; dopamine and norepinephrine reuptake inhibitors. Doses and Duration: NR Cases N= 5124 Controls N= 51240 | Cases: First day of gestation through the calendar date of spontaneous abortion Controls: First day of gestation through the same gestation age as matched case | Adjusted for maternal age, social assistance status, place of residence, gestational age at index date, comorbidities (diabetes mellitus, CV disease, asthma, untreated thyroid disease, depression, anxiety and bipolar disorder), history of spontaneous abortion and therapeutic abortion, visits to psychiatrists, number of prescribers, number of visits to physicians, duration of exposure to antidepressants and other medications in the year before pregnancy, number of prenatal visits, visits to obstetricians and other medication use during pregnancy. |
| Nordeng, 2012 ^{s0} Norway PBR Medium | Exposed: N= 699 antidepressant use during pregnancy, 1,048 use prior to pregnancy only Unexposed: N=61,648 | 6 months before pregnancy; 1st trimester, 2nd and/or 3rd trimester, total pregnancy (includes use when timing during pregnancy unknown) | Level of maternal depression, maternal age at delivery, education, parity, prepregnancy BMI, maternal asthma or CV disease, NSAID use, folic acid use, and smoking during pregnancy. |

| Author, year Country Study Design/Data Source Risk of Bias Nulman, 2002 ⁸³ Canada PC Medium | 4. Exposures (N, duration, dose) Controls (N) Exposed: N=46 tricyclic antidepressants, 40 fluoxetine Unexposed: N=36 nondepressed women | 5. Exposure Period Throughout pregnancy | 6. Confounders Mother's IQ, socioeconomic status, ethanol use and cigarette smoking, depression severity, depression duration, treatment duration, number of depressive episodes after delivery, and medications used for |
|--|---|---|--|
| Oberlander 2002 ⁵² Canada Prospective cohort/Data Source [PC] Medium | Exposed group 1, N=22, and Group 2, N=16 Group 1: Paroxetine: 11 Fluoxetine: 7 Sertraline: 4 Group 2: Paroxetine + Clonazepam: 2 Fluoxetine + Clonazepam: 14 Dose: (median mg/day) Paroxetine: 20 (10-30) Fluoxetine: 20 (10-30) Sertraline: 62.5 (50-150) Group 2: Paroxetine + Clonazepam: 20 (10-30) + 05 (.25-1.175) Fluoxetine + Clonazepam: 20 (10-30) + .43 (.175) Duration: NR Control: Unexposed N = 23 | Pre and post partum | depression treatment. Not reported |
| Oberlander, 2006 ⁵³ Canada, British Columbia PBR Medium | Any SSRI (N=1451), fluoxetine 44.7%, sertraline 25.6%, fluvoxamine 4.6%, citalopram 3.3%. Depression, No SSRI (N=14234) No depression, No SSRI (N=92192) | SSRI prescription filled more than 49 days after conception | Propensity score matching used to draw a comparison sub-group from the depressed, no SSRI group that was similar in all measured maternal characteristics to the SSRI exposed group. |
| Oberlander, 2008 ⁵⁴ Canada, British Columbia PC Medium | SRI Exposure, N=37 Paroxetine, n=18 (Median dose, 27.5mg) Fluoxetine, n=6 (Median dose, 35mg) Sertraline, n=5 (Median dose, 100mg) Venlafaxine, n=3 (Median dose, 75mg) Citalopram, n=5 (Median dose, 30mg) Duration: 94.6% continued from prior to recruitment to delivery No Exposure, N=47 | Throughout pregnancy | NR |

| Author, year Country Study Design/Data Source Risk of Bias | 4. Exposures (N, duration, dose) Controls (N) | 5. Exposure Period | 6. Confounders |
|---|--|--|--|
| Oberlander, 2008 ⁵⁵ (Birth Defects Res Part B) Canada, British Columbia PBR Medium | Controls Depression alone: N=7,883 No exposure: N=10,702 Medication Groups SRI only Benzodiazepines only SRI + Benzodiazepines SRIs: Paroxetine, 37.0%; Sertraline, 24.3%; Fluoxetine, 24.2%; Venlafaxine, 7.1%; Fluvoxamine, 4.6%; Citalopram, 2.8% | First trimester: LMP to LMP plus 90 days | Controlled for maternal illness characteristics, diseases, and complications of pregnancy diagnosed more than 60 days before birth, depression in the first trimester, and a dummy variable indicating that the mother filled a prescription after she knew that she was pregnant, and a variable indicating whether the patient had been prescribed methadone, exposure to clonazepam or clobazam (sometimes used as anticonvulsants), exposure to antipsychotics, non-SRI antidepressants. |
| Okun, 2011 ⁵⁶ US, Ohio and Pennsylvania PC Medium | SSRI vs. No SSRI Total N: 240 20 weeks: 46 vs. 194 30 weeks: 46 vs. 159 36 weeks: 36 vs. 143 duration, doses NR | At 20, 30 and 36 weeks | NR |
| Okun, 2012 ⁵⁷ US, Ohio and Pennsylvania PC Medium | At enrollment (20 weeks) No MDD, No SSRI (N=135) No MDD, taking SSRI (N=26) MDD, No SSRI (N=35) MDD, taking SSRI (N=16) Dose, duration NR | at 20 and 30 weeks of pregnancy | Adjusted for the effect of depression and SSRI status at the time of assessment (week 20 or 30), as well as history of pre-term birth, age, marital status, and employment status. |
| Palmsten 2012 ^{s8} Canada RC-LD Medium | SSRI monotherapy, N=3,169 SSRI polytherapy, N=333 SNRI monotherapy, N=408 TCA monotherapy, N=146 No antidepressant therapy, N=65,392 | During estimated gestational weeks 10 and 20 | Adjusted for delivery year, age, diabetes, multifetal gestation, obesity, primiparity, and physician visits, number of depression claims, number of psychiatrist visits/mental health hospitalizations, and dispensing of benzodiazepines, anticonvulsants, and antipsychotics |

| Author, year | | | |
|-------------------------------------|---|---|---|
| Country | | | |
| Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Pearson 2007 ⁵⁹ | Exposed: | Conception only: 7.6% | Conception only: 7.6% |
| US, Louisiana | N=84 | First and second trimesters: 15% | First and second trimesters: 15% |
| Retrospective cohort | Total SSRI: N= 42 | Third trimester: 67% | Third trimester: 67% |
| Data/Source: [AD] | Escitalopram N= | Throughout: 70% | Throughout: 70% |
| | Fluoxetine N= 17 | | |
| Medium | Sertraline N= 13 | | |
| | Paroxetine N= 12 | | |
| | Total Tricyclic Antidepressants: N= 37 | | |
| | Amitriptyline N= 2 | | |
| | Desipramine N= 7 | | |
| | Imipramine N= 11 | | |
| | Nortriptyline N= 13 | | |
| | Other: N= 5 | | |
| | Bupropion N= 2 | | |
| | Dose: NR | | |
| | Controls: Unexposed | | |
| D 1 200060 | N=168 | | A II |
| Pedersen, 2009 ⁶⁰ | SSRI: fluoxetine n=348, citalopram n=460, Paroxetine n=299, | 28 days before to 112 days after beginning of | Adjusted for maternal age, calendar time, |
| Denmark | Sertraline: n=259, more than 1 type of SSRI n=193, dose and duration | gestation | marital status, income and smoking. |
| PBD, LD | NR | | |
| Medium Pedersen, 2010 ⁶¹ | Control: No unexposed infants n=493113 | Fating | Adirected for continuous and an area of |
| | Exposed N=415, SSRI only n=336, fluoxetine n=88, citalopram n=86, | Entire pregnancy | Adjusted for maternal age, gender, age at |
| Denmark | paroxetine n=76, sertraline n=86 | | interview, breastfeeding, problems during |
| PC Medium | Untracted N=400 degreesies with ne nevel stranic medication | | pregnancy, mother-child connection, |
| Medium | Untreated N=489, depression with no psychotropic medication | | postnatal symptoms of depression, and postnatal difficulties. |
| | Unavaged N=04040, no avageure to nevel etrapic medication and ne | | postnatai diniculties. |
| | Unexposed N=81042, no exposure to psychotropic medication and no | | |
| Rai 2013 ⁶² | severe symptoms of depression SSRIs=fluoxetine, citalopram, paroxetine, sertraline | During prognancy | Adjusted for history of payabistric disorders |
| Sweden | Somis-indoxedine, citalopram, paroxedine, sertraline | During pregnancy | Adjusted for history of psychiatric disorders other than depression, parental ages, |
| CC | Non-selective monamine reuptake inhibitors (MRIs)=clomipramine, | | income, education, occupation, migration |
| Low | amitriptyline, nortriptyline | | status, and parity. |
| LUW | annuptynne, normptynne | | status, and panty. |
| | Dose, duration NR | | |
| | Cases N=4,429 | | |
| | Controls N=43,277 | | |

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|-----------------------------|--|----------------------------------|--|
| Author, year | | | |
| Country | | | |
| Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Ramos, 2008 ⁸⁴ | Doses, durations NR | Throughout pregnancy | Adjusted for maternal age, being on welfare, |
| Canada, Quebec | | | urban dweller, living alone, measures related |
| LD | Antidepressant use: | | to psychiatric disorders and measures of |
| Medium | First trimester, N=1101 | | comorbidities not related to psychiatric |
| | Second trimester, N=510 | | disorders before and during pregnancy, |
| | Third trimester, N=476 | | hypertension and diabetes diagnoses before |
| | | | and during pregnancy, gender of baby, |
| | Drugs: | | prenatal visits and year of pregnancy. |
| | SSRIs (citalopram, fluoxetine, fluvoxamine, paroxetine, sertraline); | | |
| | Tricyclics (amitriptyline, clomipramine, desipramine, doxepin, | | |
| | imipramine, nortriptyline, trimipramine); | | |
| | Other Antidepressants (bupropion, mirtazapine, moclobemide, | | |
| | nefazodone, trazodone, venlafaxine) | | |
| Ramos, 2010 ⁶⁴ | Doses, durations NR | throughout pregnancy | Adjusted for: in the year prior to pregnancy: |
| Canada, Quebec | | | the |
| LD, supplemental | SSRIs (citalopram, fluoxetine, fluvoxamine, paroxetine, sertraline); | | number of different medications used other |
| questionnaire | First trimester, N=851 | | than ADs, the number of visits to the |
| Medium | Second trimester, N=458 | | emergency department or hospitalizations, |
| | Third trimester, N=434 | | and the BMI; and on the first day of gestation |
| | | | and during |
| | Tricyclics (amitriptyline, clomipramine, desipramine, doxepin, | | pregnancy: maternal age, race, being a |
| | imipramine, nortriptyline, trimipramine) | | welfare recipient or not, area of residence, |
| | First trimester, N=85 | | parity, income, marital status, maternal |
| | Second trimester, N=29 | | weight gain, tobacco, alcohol, and illicit drug |
| | Third trimester, N=24 | | use, and finally caffeine intake, pre- |
| | | | pregnancy and gestational diabetes, pre- |
| | Other Antidepressants (bupropion, mirtazapine, moclobemide, | | pregnancy and gestational hypertension, |
| | nefazodone, trazodone, venlafaxine) | | and asthma. |
| | First trimester, N=211 | | The following proxies were used: the number |
| | Second trimester, N=70 | | of days on antidepressants and the number |
| | Third trimester, N=62 | | of visits to the psychiatrist in the year prior to |
| | | | pregnancy; the number of different |
| | Co-exposure (2 classes or more) | | psychiatric |
| | First trimester, N=109 | | disorder diagnoses received prior to and |
| | Second trimester, N=33 | | during pregnancy; the use of an anxiolytic or |
| | Third trimester, N=30 | | sedative such as benzodiazepines; and the |
| | | | use of an anticonvulsant such as |
| | No Antidepressants | | carbamazepine during pregnancy. |
| | First trimester, N=1450 | | Stratified according to antidepressant |
| | Second trimester, N=2116 | | dosage used during pregnancy. |
| | Third trimester, N=2156 | | |
| Rampono, 2009 ⁶⁵ | Exposed: N=9 citalopram (median daily dose 20 mg), 8 escitalopram | During pregnancy. Not specified. | None |
| Australia | (20 mg), 6 sertraline (50 mg, fluoxetine (30 mg), 1 fluvoxamine (150 | | |
| PC | mg), 1 paroxetine (30 mg), 11 venlafaxine | | |
| Medium | Controls: N=18 | | |

| Author, year | | | |
|---------------------------------|--|---|--|
| Country | | | |
| Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| Reebye, 2002 ⁶⁶ | Exposure SSRI: N=24, duration: median 192 days, dose: 20mg/day | During pregnancy | NR |
| Canada | SSRI+: N=14 days, duration median: 161 days, SSRI mean dose | | |
| PC | 19mg/day, Rivotril mean dose: 0.48mg/day | | |
| Medium | Nonexposed, non depressed: N=24 | | |
| Reis, 2010 ⁶⁷ | Exposed (early use): N=1664 tricyclics, 10,170 SSRIs, 37 MOAIs, | Early=before the first antenatal visit | Year of delivery, maternal age, parity, |
| Sweden | 1,351 SNRIs, 10 unspecified antidepressants | Later=during pregnancy | smoking, BMI |
| PBR | Exposed (later use): N=784 tricyclics, 4,809 SSRIs, 18 MOAIs, 538 | | |
| Medium | SNRIs, 0 unspecified antidepressants | | |
| Salisbury, 2011 ⁶⁸ | Controls (N=56) | SRI use for at least 4 consecutive weeks | Adjusted for gestational age at birth, age at |
| US, Rhode Island | MDD (N=20) | during the second and/or third trimesters | NNNS assessment. |
| PC | MDD plus SRI (N=36): sertraline 52.8%, fluoxetine 25.0%, paroxetine | | |
| Medium | 8.3%, venlafaxine 2.8% | | |
| Salkeld 2008 ⁶⁹ | SSRI or non-SSRI: dose and duration NR | Third trimester: Prescription within 90 days of | Adjusted for previous postpartum |
| Canada | | delivery | hemorrhage, multiple pregnancy, prolonged |
| CC-LD | Cases N=2460 | | labor, abnormalities of the forces of labor, |
| Low | Controls N=23,943 | | obstructed labor, perineal |
| | | | laceration or other gynecologic laceration, |
| | | | other obstetric trauma, placenta previa, |
| | | | placental abruption, and hypertensive disorders of pregnancy |
| Simon 2002 ⁷⁰ | Triovalia antidonressanta (N=200): Amitrintulina N=66 iminramina | Any entidenressent prescription during the 270 | Matched based on maternal age, year of |
| U.S. | Tricyclic antidepressants (N=209): Amitriptyline N=66, imipramine N=49, doxepin N=36, nortriptyline N=33, desipramine N=22 | Any antidepressant prescription during the 270 days before delivery | delivery, lifetime use of antidepressants, and |
| RC-HCDB | N-49, doxepiii N-30, nortiiptyiine N-33, desipramine N-22 | days before delivery | lifetime history of psychiatric treatment. |
| Low | SSRIs (N=185): Fluoxetine N=129, sertraline N=32, paroxetine N=28 | | meunie history of psychiatric treatment. |
| LOW | 30113 (14-103). Fluoxetine 14-123, 3crtraline 14-32, paroxetine 14-23 | | Adjustment for maternal tobacco use, other |
| | Dose, duration NR | | substance use, race, and number of prior |
| | Bood, daration (1) | | births. |
| Sit, 2011 ⁷¹ | SRI (N=21) | Throughout pregnancy | Smoking |
| US, Pennsylvania | Sertraline, n=9 | ought at programme, | |
| PC | Venlafaxine, n=2 | | |
| Medium | Escitalopram, n=2 | | |
| | Citalopram, n=1 | | |
| | Nortriptyline, n=1 | | |
| | Fluvoxamine, n=1 | | |
| | Fluoxetine, n=5 | | |
| | Doses, durations NR | | |
| Stephansson, 2013 ⁷² | Exposed: N=29,228 | T0 (from 3 months before until last menstrual | Smoking, country and year of birth, maternal |
| Sweden | Controls: N=1,604,649 | period before pregnancy), 1st trimester, 2nd | age, birth order, maternal diabetes and |
| PBR | | trimester, 3 trimester | hypertension, previous psychiatric |
| Medium | | | hospitalization |

| Author, year | | | |
|--|---|---|--|
| Country Study Design/Data Source | 4. Exposures (N, duration, dose) | | |
| Risk of Bias | Controls (N) | 5. Exposure Period | 6. Confounders |
| | Controls (N) Durations, NR Dose Groups: High (≥ 300mg bupropion; ≥ 225mg venlafaxine; ≥ 150mg sertraline; ≥ 100mg nortriptyline; ≥ 40mg citalopram, fluoxetine, paroxetine; ≥ 20mg escitalopram) Low-Medium: Any doses lower than in high group. MDD, antidepressant >50% of pregnancy (N=49) Monotherapies: Sertraline, n=15; Fluoxetine, n=13; Citalopram, n=4; Paroxetine, n=4; Venlafaxine, n=2; Nortriptyline, n=1 Sequential therapy: Citalopram/fluoxetine, n=1; Paroxetine/sertraline, n=1; Escitalopram/citalopram, n=1; Nefazodone/fluoxetine, n=1; Venlafaxine/sertraline, n=1; Citalopram/fluoxetine/sertraline, n=1; Citalopram/fluoxetine/sertraline, n=1 Concurrent therapy: | 5. Exposure Period Entire pregnancy | 6. Confounders Controlled for maternal age, number of previous pregnancies, historical and developing risk factors for preterm birth, hypertension, pregnancy-induced hypertension, pre-eclampsia and maternal weight gain. |
| | Sertraline/venlafaxine, bupropion, n=1 Venlafaxine/nefazodone, then sertraline, n=1 MDD, no antidepressant or discontinued during first trimester and/or <10 days exposure (N=22) First trimester only: Sertraline, n=3; Venlafaxine, n=2; Fluoxetine, n=1 6 weeks of first trimester + 9 days second trimester, Citalopram, n=1 Second trimester, seven days, sertraline, n=1 | | |
| Suri, 2011 ⁷⁴ US, California PC Medium | No psychiatric history, controls (N=19) MDD, with antidepressant (N=33) Fluoxetine: 38%, Daily dose M=22.5mg/day Sertraline: 36%, Daily dose M=90.5mg/day MDD, no antidepressant (N=16) No MDD, no antidepressant (N=15) | throughout pregnancy | Adjusted for GA at delivery |
| Toh, 2009 ⁷⁵ US CC Medium | Exposed: N=92 who continued SSRI exposure, 107 who discontinued SSRI exposure Controls: N=5,532 with no SSRI exposure | Discontinued exposure=Treated 2 months before pregnancy but discontinued before the end of the 1st trimester Continued exposure=Treated 2 months before pregnancy and continued after the 1st trimester | Region, birth year, maternal age, race/ethnicity, education, family income, gravidity, number of fetuses, prepregnancy BMI, age at menarche, diabetes mellitus, infertility treatment, cigarette smoking, coffee and alcohol intake, use of illicit drugs or other psychotherapeutic medications during pregnancy. |

| Author, year Country Study Design/Data Source Risk of Bias | 4. Exposures (N, duration, dose) Controls (N) | 5. Exposure Period | 6. Confounders |
|---|---|--|--|
| Ververs, 2009 ⁷⁶ the Netherlands AD Medium | Any antidepressant (N=784) SSRI total, n=557 Paroxetine, n=305 Fluoxetine, n=110 Tricyclic antidepressant, n=109 Other antidepressant, n=118 Dose, Duration, NR | Continuous Users: Used antidepressant before and throughout pregnancy Starters: No antidepressant use in the 6 months prior to pregnancy, but used them during pregnancy Stoppers: Antidepressant used before pregnancy, but did not do so during pregnancy Irregular Users: Any other pattern of antidepressant use during pregnancy Non-Users: No antidepressant use before or during pregnancy | NR |
| Wen 2006 ⁷⁷ Canada RC, PBD Medium | SSRI: citalopram n=14, Fluoxetine: n=973, Fluvoxamine:204, Paroxetine: 563, Sertraline: 395 Duration and dose NR | 1 year before delivery | Year of birth, type of institute at birth, (base, community, tertiary center), first 3 digits of mother's postal code |
| Wilson, 2011 ⁷⁸ US CC Medium | Cases: N=20 Controls: N=120 | After 20 weeks gestation | Maternal age, parity, neonatal gender, tobacco use, mode of delivery, diabetes (preexisting and gestational), chorioamnionitis, obesity |
| Wisner, 2009 ⁷⁹ US, Ohio Prospective cohort Medium | Any SSRI No SSRI, no depression (N=131) 2. Continuous SSRI exposure (N=48) 3. Continuous depression, no SSRI (N=14) 4. Partial SSRI exposure (N=23) 5. Partial depression, no SSRI (N=22) | Groups formed by the following definitions: No SSRI, no depression: no exposure to any antidepressant or to major depressive disorder. 2. Continuous SSRI exposure: treatment with an SSRI during the entirety of pregnancy or for the majority of each of the three trimesters. 3. Continuous depression, no SSRI: the presence of major depression throughout pregnancy or for the majority of each of the three trimesters, without SSRI treatment. 4. Partial SSRI exposure: treatment with an SSRI at some point during pregnancy but at least one full trimester without exposure; this group was equally split between women treated with an SSRI in the first and/or second trimester, but not the third, and women treated in the second and/or third trimester, but not the first. 5. Partial depression, no SSRI: major depressive disorder at some point during pregnancy but no depression for at least one trimester, without SSRI treatment | maternal age and race, Prepregnancy BMI, weight gain at week 36, and infant birth weight, preterm birth, NICU admission, 1- and 5-minute Apgar scores of 7 or less, Peripartum Events Scale subscale ratings of 2 or higher, and respiratory signs |

| Author, year Country Study Design/Data Source Risk of Bias Wogelius, 2006 ⁸⁰ Denmark PBR Medium | 4. Exposures (N, duration, dose) Controls (N) Exposed: N=1051 within 1st trimester or 30 days before, 453 within 2nd or 3rd month after conception Controls: N=150,780 | 5. Exposure Period Within 1st trimester or 30 days before, within 2nd or 3rd month after conception | 6. Confounders Maternal smoking during pregnancy, birth order, maternal age, prescriptions for antiepileptics, antidiabetics and NSAIDS during pregnancy, birth year, country, length of gestation |
|--|--|--|---|
| Yonkers 2012 ⁸¹ US Prospective Cohort [PC] Low | Exposed: N= 320 SSRI: Citalopram N=26 Escitalopram N=47 Fluoxetine N=68 Sertraline N=121 Paroxetine N=21 Other: Venlafaxine N=29 Duloxetine N=8 Dose: NR | First trimester only Second trimester and third trimester only Throughout | Adjusted for mother's age, education, race, smoking, illicit drug use, history of preterm birth. Second adjusted analysis additionally included psychiatric illness history, severity of disease, concurrent diagnoses. |
| Zeskind 2004 ⁸⁵ US Prospective cohort study/Data Source [PC, AD] Medium | N=17 Celexa N= 5, Prozac N= 1, Paxil N= 3, Zoloft N= 5; sequential combination of Paxil, Prozac, and Zoloft N= 1 or Paxil N= 1; or Paxil and Zoloft N= 1 in combination with Wellbutrin. Duration NR Control: Unexposed N = 17 | Throughout pregnancy | NR |

| - | | | |
|--------------------------|---|--|----------------------|
| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Alwan 2007 ¹ | No increase in congenital heart defects with SSRI. + association | NR | NR |
| | | NR | INR |
| US | anencephaly, craniosynostosis, omphalocele | | |
| Arm of Case | | | |
| Control Studied, | | | |
| Population based | | | |
| Medium | | | |
| Alwan 2010 ² | Maternal Bupropion use among infants | NR | NR |
| Canada | with categories of heart defects: | | |
| Case-control/Data | Adjusted OR (95% CI) | | |
| Source[CC] | Conotruncal heart defects: 0.9 (0.3–2.6) | | |
| Medium | Tetralogy of Fallot: 1.5 (0.4–5.1) | | |
| Wediam | Left outflow tract heart defects: 2.6 (1.2–5.7) | | |
| | Coarctation of aorta: 2.6 (1.0–6.9) | | |
| | | | |
| | Hypoplastic left heart: 2.7 (0.8–9.1) | | |
| | Right outflow tract heart defects: 1.2 (0.4–3.4) | | |
| | Pulmonary valve stenosis: 1.1 (0.3–3.8) | | |
| | Septal heart defects: 1.4 (0.7–2.8) | | |
| | Perimembranous VSD: 1.2 (0.5–3.4) | | |
| | ASD secundum: 1.1 (0.4–3.0) | | |
| | ASD nos: 2.2 (0.6–7.5) | | |
| | All groups of heart defects in NBDPS: 1.4 (0.8–2.5) | | |
| Andrade, 200986 | Persistent pulmonary hypertension, (unadjusted) | NR | NR |
| US | Prevalence ratio (95% CI) | | |
| Retrospective | | | |
| Cohort/Data | SSRI: PPHN among exposed was 2.14 per 1000 (95% | | |
| Source [AD] | confidence interval (CI) 0.26, 7.74) vs. not exposed was 2.72 per | | |
| Course [AD] | 1000 (95%CI 0.56, 7.93) | | |
| Medium | 1000 (337001 0.30, 1.33) | | |
| IVICUIUIII | | | |
| | | | |
| | | | |
| | | | |
| Bakker 2010 ⁴ | Congenital defects, comparison to not exposed: | NR | NR |
| CC/PBD | All heart defects: OR, 1.5; P=0.476; 95% CI, 0.5 to 4.0 | | |
| Netherlands | VSD: AOR, 0.5; P=0.528; 95% CI, 0.1-4.2 | | |
| Medium | ASD: AOR. 5.7; P=0.016; 95% CI. 1.4-23.7 | | |
| | Septal defects (includes ASD and VSD): AOR, 1.6; P=0.493; | | |
| | 95% CI. 0.4-5.6 | | |
| | Right-sided defects: AOR, 0.9; P=0.926; 95% CI, 0.1-7.6 | | |
| | Left-sided defects: AOR, 0.9, F=0.926, 95% CI, 0.1-7.6 | | |
| | | | |
| | Other defects: AOR, 1.0; P=0.967; 95% CI, 0.2-5.2 | | |

| Author, year Country Study Design/Data source | | | |
|---|--|--|----------------------|
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Bakker 2010 ⁵ The Netherlands | Adjusted ORs (95% CI) for cases and controls: | NR | NR |
| Case-Control | All heart defects: 1.5 (0.5-4.0) VSD: 0.5 (0.1-4.2) | | |
| Medium | ASD: 5.7 (1.4-23.7) | | |
| | Septal defects: 1.6 (0.4-5.6) | | |
| | Right-sided defects: 0.9 (0.1-7.6) | | |
| | Left-sided defects: 2.1 (0.5-8.7) | | |
| | Other defects: 1.0 (0.2-5.2) | | |
| Ban, 2012 ⁶ | Adjusted RRR (99% CI) | NR | NR |
| U.K. PBD | Referent category: No history of or current depression or anxiety A. Unmedicated mental illness | | |
| Medium | B. TCA | | |
| Wediaiii | C. SSRI | | |
| | Perinatal death: A: 1.4 (0.8 to 2.5), B: 1.6 (0.9 to 2.9), C:1.6 (1.1 to 2.4) | | |
| | Miscarriage: A: 1.0 (0.9 to 1.2), B: 1.3 (1.1 to 1.5), C:1.5 (1.3 to 1.6) | | |
| | Termination: A: 1.0 (0.9 to 1.2), B: 1.7 (1.5 to 1.9), C: 2.2 (2.1 to 2.4) | | |
| | Referent category: Unmedicated depression or anxiety during 1st | | |
| | trimester of pregnancy Perinatal death: B: 1.2 (0.5 to 2.7), C. 1.2 (0.6 to 2.3) | | |
| | Miscarriage: B. 1.3 (1.1 to 1.5), C: 1.4 (1.2 to 1.7) | | |
| | Termination:B.1.4 (1.2 to 1.7), C: 2.0 (1.8 to 2.3) | | |

| Author, year Country | | | |
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| Study Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Berard, 2007 ⁷ Canada, Quebec LD Medium | Adjusted ORs for Major Congenital malformations: Paroxetine vs. Other antidepressants: OR, 1.32; 95%CI, 0.79 to 2.20 Other SSRI vs. Other antidepressants: OR, 0.93; 95% CI, 0.53 to 1.62 2nd trimester exposure to any antidepressants vs. no 2nd trimester exposure: OR, 1.23; 95%CI, 0.62 to 2.43 3rd trimester exposure to any antidepressants vs. no 3rd trimester exposure: OR, 0.53; 95%CI, 0.25 to 1.11 Adjusted ORs for Major Cardiac Malformations: Paroxetine vs. Other antidepressants: OR, 1.38; 95%CI, 0.49 to 3.92 Other SSRI vs. Other antidepressants: OR, 0.89; 95%CI, 0.28 to 2.84 2nd trimester exposure to any antidepressants vs. no 2nd trimester exposure: OR, 0.72; 95%CI, 0.17 to 3.01 | NR | NR |
| | 3rd trimester exposure to any antidepressants vs. no 3rd trimester exposure: OR, 0.46; 95%CI, 0.09 to 2.30 Adjusted ORs by Dose of Paroxetine (mg/day vs. no use) Major Congenital Malformations >0 to 20: OR, 0.71; 95%CI, 0.29 to 1.71 >20-25: OR, 1.30; 95%CI, 0.76 to 2.25 >25: OR, 2.23; 95%CI, 1.19 to 4.17 Major Cardiac Malformations >0 to 20: OR, 1.76; 95%CI, 0.45 to 6.82 >20-25: OR, 0.61; 95%CI, 0.13 to 2.88 >25: OR, 3.07; 95%CI, 1.00 to 9.42 | | |

| A415 a.u a.u. | <u> </u> | | |
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| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Bogen 2010/companion Wen 2009 ⁸ U.S. PC | NR . | NR . | SRI at enrolment and infant feeding intention (N=168) RRR, 95%CI Breast and formula: 2.55 (0.85 to 7.66) Formula only: 12.31 (2.50 to 60.66), p=0.002 Unsure: 4.72 (1.01 to 21.9) Association between breastfeeding initiation and SRI use at enrolment and delivery: p>0.22 Association between breastfeeding at 2 weeks and not taking SRI at 2 weeks postpartum: p=0.04 SRI use at 2 weeks postpartum and its correlation to breastfeeding status at 12 weeks postpartum (n=99) HDRS<9: stopped breast feeding 12.0 (1.64 to 88.3) HDRS>9: Stopped breast feeding 0.28 (0.04 to 1.71) |
| Boucher, 20089 | Adjusted OR (95% CI) | NR | NR |
| Canada | Symptoms in neonates exposed vs not exposed to | | |
| LD | antidepressants in late pregnancy: | | |
| Medium | Alertness: 37 (8-174) | | |
| | Muscular tone: 20 (5-71) | | |
| | Neurological function: OR not computed because of 0 value in | | |
| | unexposed group, P<0.006 (unadjusted) | | |
| | unexposed group, PSU.000 (unadjusted) | | |
| | Feeding, Gl: 3.8 (1.7-8.1) | | |
| | Respiratory function: 2.5 (1.1-5.3) | | |
| | Serotonergic/adrenergic activity: 4.1 (1.1-15.5) | | |
| | Global (one or more of the above symptoms): 7.0 (3.2-15.3) | | |

| Author, year Country Study Design/Data | | | |
|---|--|--|---|
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Casper 2003 ¹⁰ | Mean birth weight: | Gross motor movement: mean (SD) 4.77 (.44) 4.43 (.68) P= 0.17 | Delivery and postpartum parameters: |
| US, California | Not exposed= 3363 (498.5) vs. exposed= 3394 (432.2) P=0.84 | Fine motor movement: mean (SD) 5.00 (0) 4.71 (.46) P= 0.15 | |
| Cohort study Data/Source: [CC] Medium | Birth length (cm): 49.7 (7.2) vs. 50.3 (2.5) P= 0.78 Gestational age (wk): 38.7 (1.5) vs. 39.1 (1.1) P= 0.38 Weight (%) 46.7 (27.4) vs. 48.4 (29.4) P=0.86 Height (%) 49.7 (30.1) vs. 41.9 (28.0) P= 0.42 Fronto-occipital circumference % 50.3 (28.1) vs. 54.2 (25.9) P= 0.66 Bayley scales: mean (SD) | Control of movement: mean (SD) 4.77 (.44) 4.60 (.56) P = 0.46 Tremulousness: mean (SD) 5.00 (0) 4.87 (.34) P= 0.08 Slow and delayed movement: mean (SD) 4.92 (.28) P= 0.06 Frenetic movement: mean (SD) 5.00 (0) 4.87 (.43) P= 0.15 Hypertonicity: mean (SD) 5.00 (0) 4.97 (.18) P= 0.40 Hypotonicity: mean (SD) 4.92 (.28) 4.90 (.31) P= 0.83 | Breastfeeding average duration 6.4 ± 5.9 months (unexp) vs. 8.5 ± 7.2 (exp) t = 0.85; P = 0.4 |
| | 94.3 (7.5) vs. 91.0 (13.3) P= 0.27 PDI 98.2 (9.1) vs. 90.0 (11.4) P= 0.76 BRS 89.5 (15.4) vs. 76.0 (24.6) P=0.72 | | |
| | Major structural anomalies: 1 bilateral lacrimal duct stenosis (unexposed infant) 1 small asymptomatic ventricular septal defect (exposed infant) Minor structural anomalies: 54% unexposed and 76% of exposed infants (χ2 = 0.18; P = .17). 3 or more minor structural anomalies: 15% of unexposed 29% of exposed infants (χ2 = 0.19; P = .37). | | |

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| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Chambers, 1996 ¹¹ | Infants Exposed in First Trimester vs. Control Infants: | NR | NR |
| US, California | Major malformations (ventricular septal defect, ventricular septal | | |
| CC | defect with bilateral cryptorchidism, atrial septal defect, nasal | | |
| Medium | dermoid sinus, coccygeal dermal sinus, hypospadias, bilateral | | |
| | inguinal hernia, cleft palate): 3.7% vs. 2.7%, p=0.57 | | |
| | | | |
| | Deformations (sagittal synostosis, bilateral hip dysplasia, | | |
| | unilateral hip dysplasia): 1.8% vs. 0.9%, p=0.65 | | |
| | All major structural anomalies combined: 5.5% vs. 4.0%, p=0.63 | | |
| | Infants Exposed in Exposed Early group vs. Exposed Late group | | |
| | vs. Control group | | |
| | Pre-term birth (<37 weeks): 4.1% vs. 14.3% vs. 5.9%, p=0.03 | | |
| | Admission to special care nursery: 11.9% vs. 31.5% vs. 8.8%, | | |
| | p<0.001 | | |
| | Birth weight, g: 3589 vs. 3392 vs. 3556, p=0.04 | | |
| | Birth weight <10th percentile: 3.2% vs. 11.5% vs. 3.3%, p=0.02 | | |
| | Birth length, cm: 51.5 vs. 50.4 vs. 51.5, p=0.01 | | |
| | Head circumference, cm: 34.8 vs. 34.3 vs. 34.5, p=0.19 | | |
| | Microcephaly, <3rd percentile: 2.2% vs. 3.3% vs. 1.0%, p=0.41 | | |
| | Adjusted RRs for Infants Exposed Late vs. Infants Exposed Early | | |
| | Prematurity: RR, 4.8; 95% CI, 1.1 to 20.8 | | |
| | Admission to special care nursery: RR, 2.6; 95% CI, 1.1 to 6.9 | | |
| | Poor neonatal adaption: RR, 8.7; 95% CI, 2.9 to 26.6 | | |
| Chambers, 2006 ¹² | Definite PPHN, adjusted OR (95% CI): | NR . | NR |
| US | Definite PPHN, adjusted OR (95% CI). | INK | INK |
| CC | Maternal use of antidepressants | | |
| Medium | Never used during pregnancy: 1.0 | | |
| Wicalam | Any time during pregnancy: 1.4 (0.8, 2.5); P=0.30 | | |
| | SSRI: 1.6 (0.8, 3.2); P=0.16 | | |
| | Other antidepressants:1.8 (0.2, 2.7); P=0.76 | | |
| | (5.2, 2.7) | | |
| | Maternal use of antidepressants | | |
| | Never during pregnancy: 1.0 | | |
| | Before week 20: 0.6 (0.2, 1.5); P=0.28 | | |
| | After week 20: 3.2 (1.3, 7.4); P=0.008 | | |
| | Maternal use of SSRIs | | |
| | Never during pregnancy: 1.0 | | |
| | Before week 20: 0.3 (0.1, 1.2); P=0.08 | | |
| | After week 20: 6.1 (2.2, 16.8); P=0.001 | | |

| Author, year | | | |
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| Country | | | |
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| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Cole 2007 ¹³ US Case-control/Data Source[AD] Low | All congenital malformations: Monotherapy paroxetine group compared with other: Adjusted odd ratio: 1.89 (95%CI 1.20–2.98) Mono- or polytherapy paroxetine group compared with other: Adjusted odd ratio: 1.76 (95%CI 1.18–2.64) | NR | NR |
| | Cardiovascular malformations: Monotherapy paroxetine group compared with other Adjusted odd ratio: 1.46, 95%CI 0.74–2.88 Mono or polytherapy paroxetine group compared with other Adjusted odd ratio: 1.68, 95%CI 0.95–2.97 | | |
| | Prevalence of all congenital malformations: Monotherapy paroxetine group compared with other: Adjusted odd ratio:1.89, 95%Cl 1.20–2.98 Mono- or polytherapy paroxetine group compared with other: 1.76, 95%Cl 1.18–2.64 | | |
| | Subset of infants without maternal drugs known or suspected to be teratogenic: Monotherapy paroxetine group compared with other Adjusted odd ratio: 2.03, 95%Cl 1.26–3.25 Mono or polytherapy paroxetine group compared with other Adjusted odd ratio: 1.79, 95%Cl 1.17–2.73 | | |
| Cole, 2007 ¹⁴ US LD Medium | Congenital malformations, adjusted OR (95% CI) All congenital malformations Bupropion, 1st trimester: | NR | NR |
| iviedium | Other antidepressant, 1st trimester: 0.95 (0.62, 1.45) Bupropion, outside 1st trimester: 1.00 (0.57, 1.73) | | |
| | CV malformations Bupropion, 1st trimester: Other antidepressant, 1st trimester: 0.97 (0.52, 1.80) Bupropion, outside 1st trimester: 1.07 (0.48, 2.40) | | |

| Author, year Country Study Design/Data | | | |
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| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Colvin 2012 ¹⁵ | APGAR at 5 minutes | NR | NR |
| PBD/CC | Preterm birth (<37 weeks), adjusted OR (95% CI), comparison to | | |
| Australia | not exposed: | | |
| Medium | T1: AOR, 1.10; 95% CI, 0.88 to1.37 | | |
| | T2 or T3: AOR, 1.28; 95% CI, 0.97 to 1.70 | | |
| | Any: AOR, 1.48; 95% CI, 1.28 to 1.72 | | |
| | Birthweight (<2500g) adjusted OR (95% CI), comparison to not | | |
| | exposed: | | |
| | T1: AOR, 1.10; 95% CI, 0.88 to 3.8 | | |
| | T2 or T3: AOR, 1.46; 95% CI, 1.06 to 2.02 | | |
| | Any: AOR, 1.19; 95% CI 0.99 to1.43 | | |
| | Birth length (<=1798), OR (95% CI), comparison to not exposed: | | |
| | T1: OR, 1.52; 95% CI, 1.40 to1.65 | | |
| | T2 or T3: OR, 1.53; 95% CI, 1.34 to 1.74 | | |
| | Any: OR, 1.52; 95% CI, 1.42 to 1.63 | | |
| | Mean gestation, wks, t-test, comparison to not exposed: | | |
| | T1: <0.0001 | | |
| | T2 or T3: <0.0001 | | |
| | Any: <0.0001 | | |
| | Mean birth weight, g, t-test, comparison to not exposed: | | |
| | T1: <0.0001 | | |
| | T2 or T3: <0.0001 | | |
| | Any: <0.0001 | | |
| | Mean birth length, cm, t-test, comparison to not exposed: | | |
| | T1: <0.0001 | | |
| | T2 or T3: <0.0001 | | |
| | Any: <0.0001 | | |

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| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Colvin 2012 ¹⁵ Australia | Death before one year, comparison to not exposed: overall: OR, 1.38; 95% CI, 1.06 to 1.81 | | |
| (Cont) | citalopram: OR, 1.08; 95% CI, 1.06 to 1.81 | | |
| (Cont) | paroxetine: OR, 1.44; 95% CI, 0.79 to 2.63 | | |
| | sertraline: OR, 1.45; 95% CI, 0.95 to 2.22 | | |
| | fluoxetine: OR, 1.45; 95% CI, 0.65 to 3.26 | | |
| | escitalopram: OR, 1.85; 95% CI, 0.76 to 4.49 | | |
| | fluvoxamine: OR, 1.89; 95% CI, 0.60 to 5.95 | | |
| | | | |
| | Stillbirths, comparison to not exposed: | | |
| | overall: OR, 1.07; 95% CI, 0.72 to 1.58 | | |
| | citalopram: OR, 0.93; 95% CI, 0.44 to 1.97 | | |
| | paroxetine: OR, 0.90; 95% CI, 0.34 to 2.42 | | |
| | sertraline: OR, 1.48; 95% CI, 0.85 to 2.57 | | |
| | fluoxetine: OR, 0.83; 95% CI, 0.21 to 3.35 | | |
| | escitalopram: OR, 0.63; 95% CI, 0.09 to 4.51 fluvoxamine: 0 | | |
| | nuvoxamme. 0 | | |
| | Any major birth defect: OR, 0.52; 95% CI, 0.21 to 1.28 | | |
| Croen, 2011 ¹⁶ | NR | Adjusted OR for Risk of Autism Spectrum Disorder vs. | NR |
| US, California | | Unexposed in year before delivery | |
| CC | | Any antidepressant: OR, 2.0; 95%CI, 1.2 to 3.6 | |
| Medium | | Any SSRI: OR, 2.2; 95%CI, 1.2 to 4.3 | |
| | | SSRI only: OR, 2.6; 95%CI, 1.3 to 5.4 Tricyclics and/or Dual-Action: OR, 1.6; 95%CI, 0.5 to 4.5 | |
| | | Theyelies and/of Dual-Action: OK, 1.0, 95/601, 0.3 to 4.5 | |
| | | Adjusted OR for Risk of Autism Spectrum Disorder for SSRI use | |
| | | by trimester vs. Unexposed in year before delivery | |
| | | Preconception period: OR, 2.1; 95%CI, 1.1 to 4.2 | |
| | | First trimester: OR, 3.8; 95%CI, 1.8 to 7.8 | |
| | | Second trimester: OR, 1.9; 95%CI, 0.7 to 5.6 | |
| | | Third trimester: OR, 2.9; 95%CI, 1.0 to 8.0 | |
| Davidson, 2009 ¹⁷ | SSRI vs. Controls | year before delivery: OR, 2.2; 95%CI, 1.2 to 4.2 | SSRI vs. Controls |
| Israel | GA: 38.6 vs. 38.9, NSD | 1313 | Weight gain (kg): 62.7 vs. 64.5, NSD |
| CC | Birth weight, g: 3173 vs. 3333, NSD | | 1.0.g.n. gam (ng). 02.1 vo. 04.0, 110.0 |
| Medium | Birth length, cm: 49.0 vs. 50.4, p=0.008 | | |
| | Head circumference, cm: 33.8 vs. 34.4, p=0.08 | | |
| | Birth weight <10th percentile: 29% vs. 5%, p=0.045 | | |
| | Birth length <10th percentile: 14% vs. 0%, p=0.08 | | |
| | Head circumference <10th percentile: 19% vs. 0%, p<0.04 | | |
| | Discharge day: 3.9 vs. 2.7, p=0.005 | | |

| Author, year Country Study | | | |
|----------------------------------|---|--|----------------------|
| Design/Data | | | |
| source Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Davis, 2007 ¹⁸ | At 30 days: | At 365 days: | NR |
| US | RRs, SSRI vs. No SSRI | RRs, SSRI vs. No SSRI | INIX |
| LD | Preterm delivery: RR, 1.45; 95%CI, 1.25 to 1.68 | One or more malformation of interest: RR, 0.97; 95%CI, 0.81 to | |
| Medium | One or more perinatal event of interest: RR, 1.16; 95%CI, 1.06 to 1.26 | 1.16 Spina Bifida: RR, 2.21; 95%Cl, 0.30 to 16.00 | |
| | Fetal distress: RR, 6.00; 95%Cl, 1.88 to 19.18 Excessive fetal growth: RR, 6.27; 95%Cl, 0.83 to 47.43 | Other congenital anomalies of nervous system: RR, 1.98; 95% CI. 0.94 to 4.19) | |
| | Polyhydramnios: RR, 29.35; 95%CI, 3.30 to 261.08 | Congenital anomalies of the eye: RR, 1.33; 95%CI, 0.82 to 2.17 | |
| | Polyhydramnios and oligohydramnios: RR, 8.34; 95%CI, 1.94 to 35.80 | Congenital anomalies of ear, face and neck: RR, 0.37; 95%Cl, 0.27 to 2.60 | |
| | Complications of placenta, cord, and membranes: RR, 0.69; 95%CI, 0.31 to 1.54 | Bulbus cordis anomalies and anomalies of cardiac septal closure: RR, 0.93; 95%CI, 0.50 to 1.73 | |
| | Complications of delivery, including malpresentation and malformation: RR, 1.42; 95%Cl, 1.05 to 1.93 | Other congenital anomalies of the heart: RR, 0.88; 95%CI, 0.42 to 1.86) | |
| | Disorders related to gestational age and birth weight: RR, 0.92; 95%CI, 0.68 to 1.26 | Other congenital anomalies of circulatory system: RR, 1.55; 95%CI, 0.83 to 2.90 | |
| | Birth trauma: RR, 1.51; 95%CI, 1.04 to 2.20 | Congenital anomalies of respiratory system: RR, 0.23; 95%CI, | |
| | Intrauterine hypoxia and asphyxia: RR, 1.38; 95%CI, 0.93 to 2.06 | 0.03 to1.68 | |
| | Respiratory distress syndrome and other respiratory conditions: | Cleft palate and cleft lip: RR, 2.22; 95%Cl, 0.69 to 7.08 | |
| | RR, 1.97; 95%CI, 1.65 to 2.35 | Other congenital anomalies of upper alimentary tract: RR, 1.25; | |
| | Neonatal hemorrhage and hemolytic diseases of the newborn: RR, 1.09; 95%CI, 0.69 to 1.70 | 95%CI, 0.65 to 2.42 Other congenital anomalies of digestive system: RR, 1.37; | |
| | Other causes of perinatal jaundice: RR, 0.91; 95%CI, 0.76 to | 95%CI. 0.44 to 4.27 | |
| | 1.09 | Congenital anomalies of genital organs: RR, 0.82; 95%CI, 0.50 to | |
| | Endocrine and metabolic disturbances specific to newborn, | 1.34 | |
| | including neonatal hypoglycemia: RR, 1.61; 95%CI, 1.15 to 2.27 Disorders of the digestive system: RR, 0.52; 95%CI, 0.07 to 3.68 | Congenital anomalies of urinary system: RR, 0.93; 95%CI, 0.44 to 1.96 | |
| | Disorders of temperature regulation, including hypothermia: RR, 1.56; 95%CI, 1.06 to 2.31 | Certain congenital musculoskeletal deformities: RR, 0.76; 95%CI, 0.46 to 1.26 | |
| | Convulsions in the newborn: RR, 2.60; 95%CI, 1.16 to 5.84 Feeding problems in the newborn: RR, 1.26; 95%CI, 0.97 to 1.65 | Other congenital anomalies of limbs: RR, 0.67; 95%Cl, 0.35 to 1.29 | |
| | Other conditions: RR, 1.41; 95%CI, 1.12 to 1.78 | Other congenital musculoskeletal anomalies: RR, 0.60; 95%CI, | |
| | Observation and evaluation of newborns for suspected condition | 0.29 to 1.27 | |
| | not found: RR, 2.22; 95%CI, 1.70 to 2.90 One or more perinatal event of interest: RR, 1.16; 95%CI, 1.06 to | Congenital anomalies of the integument: RR, 0.89; 95%CI, 0.46 to 1.71 | |
| | 1.26 | Other and unspecified congenital anomalies: RR, 0.84; 95%CI, 0.32 to 2.24 | |

| Author, year Country Study | | | |
|----------------------------------|---|---|----------------------|
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Davis, 2007 ¹⁸ | CONTINUED | CONTINUED | |
| (Cont) | RRs, Tricyclics vs. No tricyclics | RRs, Tricyclics vs. No tricyclics | |
| , , | Preterm delivery: RR, 1.67; 95%CI, 1.25 to 2.22 | One or more malformation of interest: RR, 0.86; 95%CI, 0.57 to | |
| | One or more perinatal event of interest: RR, 1.25; 95%Cl, 1.03 to | 1.30 | |
| | 1.51 | Spina bifida: RR, 12.43; 95%Cl, 1.70 to 90.66 | |
| | Complications of placenta, cord, and membranes: RR, 1.44; 95%CI, 0.36 to 5.72 | Other congenital anomalies of nervous system: RR, 1.27; 95%CI, 0.18 to 8.99 | |
| | Complications of delivery, including malpresentation and | Bulbus cordis anomalies and anomalies of cardiac septal closure: | |
| | malformation: RR, 1.46; 95%CI, 0.70 to 3.02 | RR, 0.92; 95%CI, 0.23 to 3.70 | |
| | Disorders related to gestational age and birth weight: RR, 1.29; 95%CI, 0.67 to 2.51 | Other congenital anomalies of circulatory system: RR, 0.74; 95%CI, 0.10 to 5.29 | |
| | Birth trauma: RR, 1.81; 95%CI, 0.76 to 4.30 Intrauterine hypoxia and asphyxia: RR, 1.03; 95%CI, 0.34 to 3.13 | Congenital anomalies of respiratory system: RR, 1.09; 95%CI, 0.15 to 7.72 | |
| | Respiratory distress syndrome and other respiratory conditions: RR, 2.02; 95%CI, 1.33 to 3.06 | Other congenital anomalies of upper alimentary tract: RR, 1.29; 95%CI, 0.32 to 5.15 | |
| | Neonatal hemorrhage and hemolytic diseases of the newborn: RR, 2.12; 95%CI, 0.97 to 4.64 | Other congenital anomalies of digestive system: RR, 2.49; 95%CI. 0.35 to 17.50 | |
| | Other causes of perinatal jaundice: RR, 1.02; 95%Cl, 0.67 to 1.54 | Congenital anomalies of genital organs: RR, 0.77; 95%Cl, 0.25 to 2.38 | |
| | Endocrine and metabolic disturbances specific to newborn, including neonatal hypoglycemia: RR, 2.15; 95%Cl, 1.04 to 4.44 | Congenital anomalies of urinary system: RR, 0.64; 95%CI, 0.09 to 4.53 | |
| | Disorders of the digestive system: RR, 3.08; 95%Cl, 0.43 to 21.89 | Certain congenital musculoskeletal deformities: RR, 1.42; 95%Cl, 0.65 to 3.12 | |
| | Disorders of temperature regulation, including hypothermia: RR, 2.36; 95%CI, 1.08 to 5.16 | Other congenital anomalies of limbs: RR, 2.55; 95%Cl, 1.23 to 5.29 | |
| | Convulsions in the newborn: RR, 2.76; 95%CI, 0.39 to 19.54 Feeding problems in the newborn: RR, 1.69; 95%CI, 0.96 to 2.97 | Other congenital musculoskeletal anomalies: RR, 0.82; 95%Cl, 0.21 to 3.24 | |
| | Other conditions: RR, 1.71; 95%CI, 1.02 to 2.86 | Other and unspecified congenital anomalies: RR, 0.92; 95%CI, | |
| | Observation and evaluation of newborns for suspected condition | 0.13 to 6.49 | |
| | not found: RR, 1.07; 95%CI, 0.41 to 2.81 | | |
| | One or more perinatal event of interest: RR, 1.25; 95%CI, 1.03 to | | |
| | 1.51 | | |

| Author, year | | | |
|-----------------------------------|---|--|----------------------|
| Country | | | |
| Study | | | |
| Design/Data source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Dubnov-Raz, | SSRI vs. Control | NR | NR |
| 200819 | GA: 39 vs. 39, p=0.84 | | |
| Israel CC | Birth weight, g: 3135 vs. 3365, p=0.04 | | |
| Medium | ECG results, SSRI vs. Control | | |
| Wicalam | Heart rate, bpm: 129 vs. 138, p=0.01 | | |
| | PR interval, ms: 98 vs. 100, p=0.31 | | |
| | QRS duration, ms: 51 vs. 52, p=0.28 | | |
| | QT interval, ms: 280 vs. 261, p<0.001 | | |
| | QTc interval, ms: 409 vs. 392, p=0.02 JT interval, ms: 229 vs. 209, p<0.001 | | |
| | 31 interval, fils. 229 vs. 209, p<0.001 | | |
| | Pathologically prolonged QTc interval (462-543ms): 10% vs. 0.0%, p=0.057 | | |
| Dubnov-Raz, 2012 ²⁰ | Adjusted Difference scores for infant birth outcomes, SSRI vs. Control: | NR | NR |
| Israel | Birth weight, g: -96; 95% CI, -257 to 65; p=0.20 | | |
| CC | Birth weight, z-score: -0.31; 95% CI, -0.71 to 0.10; p=0.14 | | |
| Medium | Length: -0.74; 95%CI, -1.53 to 0.06; p=0.07 | | |
| | Head circumference: -0.72; 95%CI, -1.22 to 0.22 | | |
| | Adjusted Difference scores for infant tibial bone density, SSRI vs. | | |
| | Control: | | |
| | Speed of sound (m/s): 3.8; 95%CI, -52 to 60 | | |
| El Marroun 2012 ²¹ | Speed of sound (z-score): 0.01; 95%CI, -0.47 to 0.50 Exposed higher risk for preterm birth (OR=2.14; 95% CI: 1.08 to | NR | NR |
| Netherlands | 4.25; P=.03) | NIX | IVIX |
| Prospective | | | |
| Cohort*Data | Fetal Weight Gain: | | |
| Source [PC and PD] | (Adjusted decrease weight, g 95% CI) Exposed: -2.3 (-7.0 to 2.3) P=0.32 | | |
| . 5, | Unexposed: -4.4g (-6.3 to -2.4) p<.001 | | |
| Low | , | | |
| | Fetal Head Growth: | | |
| | (Adjusted decrease circumference, mm, 95% CI) | | |
| | Exposed: -0.18 (-0.32 to -0.07) P= 0.003 Unexposed: -0.08 (-0.14 to -0.03) P= 0.003 | | |
| | 5.00 (0.14 to 0.00)1 0.000 | | |
| | Head Circumference at Birth: | | |
| | Exposed: -5.88 (-11.45 to -0.30) P= 0.04 | | |
| | Unexposed: 0.05 (-3.48 to 4.43) P= 0.81 | | |
| | Control group (reference) | | |

| Author, year Country Study | | | |
|----------------------------------|---|--|----------------------|
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Ferreira 2007 ²² | Neonatal behavioral signs (Adjusted OR, 95% CI): | NR | NR |
| US | 3.1 (1.3–7.1) | | |
| Retrospective | | | |
| Cohort/Data | Prematurity (Adjusted OR, 95% CI): | | |
| Source[AD] | 3.9 (1.6–9.5) 2.4 (0.9–6.3) | | |
| | A L | | |
| Medium | Admission to specialized care (Adjusted OR, 95% CI): | | |
| | 2.4 (0.8–6.9) | | |
| | Malformations: | | |
| | | | |
| | phenotypic dimorphisms N=2 | | |
| | absence of septum pellucidum N=1 | | |
| | sagittal craniosynostosis N=1 pulmonary peripheral stenosis N=1 | | |
| | hypospadias N=1 | | |
| | persistent pulmonary hypertension N=0 | | |
| | Unexposed: | | |
| | phenotypic dimorphisms N=3 | | |
| | angioma N=1 | | |
| | heart murmur N=1 | | |
| | cryptorchidia N=1 | | |
| | Cryptorchida N=1 | <u>l</u> | |

| Author, year | | | |
|-----------------------------|---|--|----------------------|
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Figueroa 2010 ²³ | NR | ADHD by age of 5 years: (OR 95%CI) | NR |
| US | | | |
| Retrospective | | SSRI before pregnancy: 1.20 (0.70–2.04) P= .50 | |
| cohort | | SSRI during pregnancy: 0.91 (0.51–1.60) P=.74 | |
| Design/Data | | First trimester:1.62 (0.79–3.32) P=.19 | |
| Source[AD] | | Second trimester: .59 (0.58–4.35) P= .37 | |
| | | Third trimester: 0.38 (0.14–1.03) P=.06 | |
| Medium | | SSRI after pregnancy: 2.04 (1.43–2.91) P<.001 | |
| | | | |
| | | Bupropion before pregnancy: 0.49 (0.12–2.02) P=.32 | |
| | | Bupropion during pregnancy: 3.63 (1.20–11.04) P=.02 | |
| | | First trimester: 2.06 (0.35–12.16) P=.42 | |
| | | Second trimester:14.66 (3.27–65.73) P<.001 | |
| | | Third trimester: <0.01 (<0.01–>99.9) P=.94 | |
| | | Bupropion after pregnancy: 0.90 (0.32–2.53) P=.84 | |
| | | | |
| | | Other antidepressant | |
| | | during pregnancy: 0.65 (0.09–4.79) P= .68 | |
| | | | |
| | | Anticonvulsants | |
| | | during pregnancy: 0.36 (0.05–2.65) P=.32 | |
| | | | |
| | | Benzodiazepines | |
| | | during pregnancy:1.82 (0.86–3.85) P=.12 | |
| | | | |
| | | Other psychotropics during pregnancy: <0.01 (<0.01–>99.9) P= | |
| | | .96 | |
| Gorman, 2012 ²⁴ | Exposed vs Unexposed: | NR | NR |
| US, California | Initiating breastfeeding: | | |
| Prospective | SSRI Before delivery: Adjusted OR, 0.43; 95% CI, 0.20-0.94 | | |
| cohort/TIS | SSRI At time of delivery: Adjusted OR 0.34; 95% CI, 0.16-0.72 | | |
| Medium | Analysis by race, maternal age, alcohol use, low Apgar: NSD | | |
| | Cesarean birth 0.36 (0.20-0.66) | | |
| | Compared to high SES: | | |
| | Medium 0.46 (0.22-0.99) | | |
| | Low 0.23 (0.11-0.48) | | |
| | | | |
| | Full breast-feeding at 2 weeks: | | |
| | Before delivery 0.73 (0.41-1.32) | | |
| | At time of delivery 0.67 (0.39-1.15) | | |
| | Analysis by race, maternal age, BMI, SES = NSD | | |

| Author, year Country Study Design/Data source Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
|--|--|--|---|
| Grzeskowiak 2012 ²⁵ Australia Retrospective cohort/LD Medium | (A) SSRI use vs psychiatric illness/no SSRI use (B) SSRI use vs no psychiatric illness Preterm delivery (<37 weeks): (A)=2.68 (1.83-3.93), (B) 2.46 (1.75-3.50) Low birth weight (<2500 g): (A)=2.26 (1.31-3.91), (B) 2.57 (1.57-4.21) SGA: (A)=1.13 (0.65-1.94), (B)=1.17 (0.71-1.94) Neonate admitted to hospital: (A)=1.92 (1.39-2.65), (B)=2.37 (1.76-3.19) Neonate length of stay > 3 days: (A)=1.93 (1.11-3.36), (B)=2.20 (1.34-3.59) | NR | NR |
| Heikkinen, 2002 ²⁶ Finland PC | Citalopram vs control Gestational age at birth (week) mean, range: 39 (37to 41) vs 40 (38to 41) Malformations: 0% vs 0% Weight at birth (g) mean (range): 3460 (2830to 4380) vs 3560 (3220 to 4260) Weight at 12 month (g), mean(range): 10560 (11810 to 9420) vs 9810 (10860 to 8900) | NR | Citalopram vs Control Delivery mode Vaginal: 91% vs 90% Cesarean: 9.1% vs 10% Breast-fed%: 81.8% vs 90% |

| Author, year Country Study Design/Data source | | | |
|---|--|--|----------------------|
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Jimenez-Solem 2012 ²⁷ Denmark RC-PD Low | Comparisons to women with no exposure, adjusted ORs (95% C1) First trimester/Paused during pregnancy Major malformations: 1.33 (1.16 to 1.53)/1.27 (0.91-1.78) Congenital malformations of the heart: 2.01 (1.60 to 2.53/1.85 (1.07-3.20) Septal defects: 2.04 (1.53-2.72)/2.56 (1.41-4.64) Ventricular septal defects: 1.62 (1.05-2.50)/3.74 (1.93-7.23) Atrial septal defects: 2.60 (1.84-3.68)/2.61 (1.17-5.84) Congenital malformations of the digestive system: 1.80 (1.04-3.12)/0.75 (0.11-5.35) Congenital malformations of the internal urinary system: 0.84 (0.45-1.57)/None Congenital malformations of the external genital organs: 1.55 (0.99-2.44)/0.89 (0.22-3.59) Congenital malformations of the limbs: 0.93 (0.71-1.23)/1.37 (0.80-2.32) Low-dose/high-dose SSRI during pregnancy Major malformations: 1.26 (1.05-1.51)/1.44 (1.15-1.79) Congenital malformations of the heart: 1.83 (1.35-2.48)/2.25 (1.60-3.19) Congenital malformations of the digestive system: 1.78 (0.89-3.58)/1.80 (0.75-4.35) Congenital malformations of the internal urinary system: 0.82 (0.37-1.83)/0.88 (0.33-2.34) Congenital malformations of the external genital organs: 1.32 (0.72-2.46)/1.91 (0.99-3.68) Congenital malformations of the limbs: 0.94 (0.67-1.33)/0.91 (0.59-1.42) Septal defects: 1.86 (1.15-3.00)/1.12 (0.28-4.51)/1.73 (0.89-3.33)/1.89 (0.85-4.23)/3.09 (1.82-5.25) When analyses were further adjusted for co-medications, the results showed no considerable change in the estimates or their level of significance. Individual SSRIs: citalopram/escitalopram/fluoxetine/paroxetine/sertraline Major: 1.51 (1.21-1.87)/0.69 (0.34-1.4)/1.18 (0.86-1.61)/1.25 (0.84-1.85)/1.41 (1.03-1.92) Of the nervous system: 0.84 (0.21-3.37)/2.25 (0.32-16.05)/1.44 (0.36-5.79)/1.19 (0.17-8.45)/0.85 (0.12-6.07) Neural tube defects: Only fluoxetine=3.22 (0.45-23.03) Of the eye: 2.62 (1.09-6.34)/None/0.93 (0.13-6.63)/None/1.05 (0.15-7.45) Of the ear, face and neck: None/None/None/8.32 (1.16-59.81)/6.13 (0.85-44.05) | NR | NR |

| Author, year | | | |
|--------------------|---|---|----------------------|
| Country | | | |
| Study | | | |
| Design/Data source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Jimenez-Solem | (CONT) | c. Offine detectines after 12 months of ago | o. maternal outcomes |
| 2012 ²⁷ | Of the nervous system: 0.84 (0.21-3.37)/2.25 (0.32-16.05)/1.44 | | |
| (CONT) | (0.36-5.79)/1.19 (0.17-8.45)/0.85 (0.12-6.07) | | |
| | Neural tube defects: Only fluoxetine=3.22 (0.45-23.03) | | |
| | Of the eye: 2.62 (1.09-6.34)/None/0.93 (0.13-6.63)/None/1.05 | | |
| | (0.15-7.45) | | |
| | Of the ear, face and neck: None/None/None/8.32 (1.16-59.81)/6.13 (0.85-44.05) | | |
| | Of the heart: 1.91 (1.31-2.77)/1.06 (0.34-3.3)/2.05 (1.27- | | |
| | 3.31)/1.54 (0.77-3.1)/2.73 (1.75-4.26) | | |
| | Septal defects: 1.86 (1.15-3)/1.12 (0.28-4.51)/1.73 (0.89- | | |
| | 3.33)/1.89 (0.85-4.23)/3.09 (1.82-5.25) | | |
| | Ventricular septal defects: 1.41 (0.67-2.96)/0/1.03 (0.33-3.2)/1.13 (0.28-4.54)/3.6 (1.86-6.96) | | |
| | Atrial septal defects: 2.41 (1.36-4.26)/1.01 (0.14-7.23)/2.53 (1.2- | | |
| | 5.32)/3.51 (1.57-7.87)/2.85 (1.35-5.99) | | |
| | Atrioventricular septal: 0/8.71 (1.21-62.64)/0/0/3.22 (0.45-23.03) | | |
| | Of the respiratory system: 1.03 (0.26-4.11)/2.66 (0.37-19.02)/0.94 | | |
| | (0.13-6.67)/1.52 (0.21-10.8)/2.09 (0.52-8.38) Oro-facial clefts: 1.8 (0.67-4.81)/0/0.76 (0.11-5.4)/0/0.88 (0.12- | | |
| | 6.24) | | |
| | Of the digestive system: 2.5 (1.19-5.27)/0/1.25 (0.31-5)/2.09 | | |
| | (0.52-8.39)/1.43 (0.36-5.74) | | |
| | Abdominal wall defects: 2.54 (0.35-18.3)/0/0/0/0 | | |
| | Of the internal urinary system: 2.02 (1.05-3.89)/0/0/0/0.44 (0.06- | | |
| | 3.11) Of the external genital organs: 1.7 (0.85-3.41)/1.08 (0.15- | | |
| | 7.67)/1.09 (0.35-3.38)/3.83 (1.71-8.57)/0.41 (0.06-7.93) | | |
| | Of the limbs: 1.13 (0.76-1.7)/0.25 (0.04-1.75)/0.76 (0.41- | | |
| | 1.42)/0.91 (0.43-1.92)/1 (0.55-1.81) | | |
| | Of the musculoskeletal system: 1.25 (0.4-3.88)/2.18 (0.31- | | |
| | 15.57)/1.46 (0.36-5.85)/1.2 (0.17-8.55)/0.83 (0.12-5.9) | | |
| | Chromosomal abnormalities: 0.59 (0.08-4.19)/0/0.97 (0.14-6.92)/4.65 (1.49-14.53)/2.35 (0.59-9.45) | | |
| | 0.92)/4.05 (1.49-14.53)/2.35 (0.39-9.45) Other malformations: 1.32 (0.42-4.12)/0/3.08 (1.15-8.23)/0/0.88 | | |
| | (0.12-6.28) | | |
| Jimenez-Solem | (CONT) | | |
| 2012 ²⁷ | And teratogenic syndromes: 3.58 (0.49-26.33)/0/0/0/10.13 (1.36- | | |
| (CONT) | 75.44) | | |
| | Genetic syndromes: 0.39 (0.06-2.78)/0/1.79 (0.25-12.76)/0/0 | | |
| | Non-SSRI antidepressants: TCAs/other antidepressants: Any congenital malformation: 1.04 (0.53-2.03)/0.70 (0.47-1.05) | | |
| | Malformations of the heart: 1.33 (0.42-4.15)/0.99 (0.51-1.91) | | |

| Author, year Country Study Design/Data source | | | |
|---|--|--|----------------------|
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Jimenez-Solem, 2013 ²⁸ | Stillbirth/neonatal mortality, adjusted OR (95% CI) | NR | NR |
| Denmark | Unexposed: 1.00 (reference) Any SSRI | | |
| PBR | 1 1st trimester: 0.77 (0.43,1.36)/0.56 (0.25,1.24) | | |
| Low | 1st and 2nd trimester: 0.84 (0.40,1.77)/0.90 (0.37, 2.17) | | |
| LOW | All trimesters: 1.06 (0.71, 1.58)/1.27 (0.82, 1.99) | | |
| | Fluoxetine | | |
| | 1st trimester: 1.37 (0.56, 3.31)/1.18(0.38, 3.67) | | |
| | 1st and 2nd trimester: 0.65 (0.16, 2.63)/1.98 (0.74, 5.31) | | |
| | All trimesters: 0.97 (0.50, 1.87)/0.63 (0.24, 1.69) | | |
| | Citalopram | | |
| | 1st trimester: 0.60 (0.25, 1.45)/0.71 (0.27, 1.91) | | |
| | 1st and 2nd trimester: 0.26 (0.04, 1.88)/0.83(0.21, 3.32) | | |
| | All trimesters: 1.44 (0.74, 2.79)/2.49 (1.33, 4.65) | | |
| | Escitalopram | | |
| | 1st trimester:/0.86 (0.12, 6.12) | | |
| | 1st and 2nd trimester: 1.29 (0.18, 9.28)/ | | |
| | All trimesters:/2.07 (0.29, 14.85) | | |
| | Paroxetine 2.04(2.00.0.70)/ | | |
| | 1st trimester: 0.94(0.23, 3.78)/ | | |
| | 1st and 2nd trimester: 2.28 (0.73, 7.17)/2.08 (0.52, 8.40) | | |
| | All trimesters: 0.66 (0.17, 2.67)/1.95 (0.73, 5.23) Sertraline | | |
| | 1 1st trimester: 1.05 (0.34, 3.28)/0.98 (0.24, 3.92) | | |
| | 1st and 2nd trimester: 0.54 (0.08, 3.87)/0.82(0.12, 5.85) | | |
| | All trimesters: 1.02 (0.46, 2.29)/0.26 (0.04, 1.81) | | |
| Jordan 2008 29 | HARMS: 28% SRI neonates: Newborn Behavioral Syndrome. No | NR | NR |
| US Clinic Appt | more likely to be admitted to NICU, have Resp abnormal, | | |
| Logs, | prolonged hosp | | |
| Pediatrics records | | | |
| review | | | |
| AD | | | |
| Medium | | | |

| Author, year | | | |
|----------------------------|--|--|----------------------|
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Kallen, 2004 ³⁰ | ORs for type and timing of antidepressant use, vs. total | NR | NR |
| Sweden | population | | |
| PBR | Preterm Delivery (<37 week) | | |
| Medium | All antidepressants: OR, 1.96; 95%CI, 1.60 to 2.41 | | |
| | ≥24 week: OR, 2.02; 95%CI, 1.54 to 2.63 | | |
| | Tricyclic drugs: OR, 2.50; 95%CI, 1.87 to 3.34 | | |
| | SSRIs: OR, 2.06; 95%CI, 1.58 to 2.69 | | |
| | Low Birth Weight (<2500 a) | | |
| | Low Birth Weight (<2500 g) All antidepressants: OR, 1.98; 95%CI, 1.55 to 2.52 | | |
| | ≥24 week: OR, 1.66; 95%Cl, 1.18 to 2.34 | | |
| | Tricyclic drugs: OR, 1.88; 95%CI, 1.28 to 2.76 | | |
| | SSRIs: OR, 1.98; 95%CI, 1.42 to 2.76 | | |
| | OOMS. ON, 1.50, 557601, 1.42 to 2.70 | | |
| | Small for GA (≤2 SDs) | | |
| | All antidepressants: OR, 0.83; 95%CI, 0.53 to 1.30 | | |
| | ≥24 week: OR, 0.96; 95%CI, 0.56 to 1.65 | | |
| | Tricyclic drugs: OR, 1.00; 95%CI, 0.52 to 1.94 | | |
| | SSRIs: OR, 0.80; 95%CI, 0.44 to 1.44 | | |
| | | | |
| | Large for GA (≥2 SDs) | | |
| | All antidepressants: OR, 1.20; 95%CI, 0.93 to 1.56 | | |
| | ≥24 week: OR, 1.20; 95%Cl, 0.85 to 1.70 | | |
| | Tricyclic drugs: OR, 1.18; 95%CI, 0.79 to 1.74 SSRIs: OR, 1.19; 95%CI, 0.83 to 1.70 | | |
| | 33Ni3. ON, 1.19, 9370Cl, 0.03 to 1.70 | | |
| | Respiratory Distress | | |
| | All antidepressants: OR, 2.21; 95%CI, 1.71 to 2.86 | | |
| | ≥24 week: OR, 2.12; 95%CI, 1.50 to 3.00 | | |
| | Tricyclic drugs: OR, 2.20; 95%CI, 1.44 to 3.35 | | |
| | SSRIs: OR, 1.97; 95%CI, 1.38 to 2.83 | | |
| | | | |
| | Jaundice | | |
| | All antidepressants: OR, 1.13; 95%CI, 0.84 to 4.27 | | |

| Author, year Country Study Design/Data source Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
|---|---|--|----------------------|
| Kallen, 2004 (Cont) ³⁰ | CONTINUED | | |
| | Low Apgar Score All antidepressants: OR, 2.33; 95%CI, 1.49 to 3.64 ≥24 week: OR, 3.36; 95%CI, 2.05 to 5.49 Tricyclic drugs: OR, 2.99; 95%CI, 1.58 to 5.65 SSRIs: OR, 2.28; 95%CI, 1.27 to 4.10 RR for Convulsions vs. No antidepressants All antidepressants: RR, 4.7; 95%CI, 2.2 to 9.0 ≥24 week: RR, 4.4; 95%CI, 1.4 to 10.3 Tricyclic drugs: RR, 6.8; 95%CI, 2.2 to 16.0 SSRIs: RR, 3.6; 95%CI, 1.0 to 9.3 | | |
| | Crude ORs, Paroxetine vs. Other SSRIs Preterm delivery (<37 week): OR, 1.28; 95%CI, 0.57 to 2.67 Low birth weight (<2500 g): OR, 1.44; 95%CI, 0.40 to 4.24 Small for GA: OR, 0.90; 95%CI, 0.09 to 4.34 Large for GA: OR, 1.77; 95%CI, 0.70 to 4.11 Respiratory distress: OR,1.23; 95%CI, 0.44 to 3.05 Jaundice: OR, 0.87; 95%CI, 0.21 to 2.71 Hypoglycemia: OR, 0.83; 95%CI, 0.20 to 2.55 Convulsions: OR, 1.40; 95%CI, 0.03 to 15.70 | | |

| Author, year Country Study Design/Data | | | |
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| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Kallen 2007 ³¹ Sweden Retrospective cohort/Data Source[PBR] Medium | Risk for congenital malformations*: (Adjusted OR**, 95% CI): Any SSRI: 0.89 (0.79–1.07) Fluoxetine: 0.85 (0.61–1.19) Citalopram: 0.94 (0.78–1.13) Paroxetine: 1.03 (0.76–1.38) Sertraline: 0.78 (0.61–1.00) Fluvoxamine: 1.05 (0.13–3.80)** | NR | NR |
| | Escitalopram: 0.91 (0.19–2.66)** *Adjustments were made for year of birth, maternal age, parity, smoking, and > 3 previous miscarriages **Risk ratios | | |
| Kallen 2008 ³² Sweden Unclear/Data Source[PBR] | PPHN: Maternal use of SSRI and PPHN in births after 34 completed weeks: (Adjusted Risk Ratio, 95% CI) 2.4, (1.2–4.3) | NR | NR |
| Medium | Risk for an infant to have PPHN exposed SSRI during pregnancy: Exposed in early pregnancy (Adjusted Risk Ratio, 95% CI) All infants: 2.01 (1.00–3.60) >34 weeks: 2.38 (1.19–4.25) >37 weeks: 2.36 (1.08–4.78) Exposed in early pregnancy with known exposure also in late pregnancy: (Adjusted Risk Ratio, 95% CI) All infants: 2.91 (0.94–6.78) | | |
| | >34 weeks: 1.40 (3.57 1.16–8.33) >37 weeks:1.24 (3.70 1.01–9.48) | | |

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| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Kieler 2012 ³³ | Small for gestational age (< 2 SDs of sex-specific mean birth | NR | NR |
| Nordic countries | weight: Exposed=3% vs not exposed=2.4%, P=NR | | |
| Retrospective | g =/possu | | |
| cohort, PBD | Apgar score at 5 min: | | |
| Medium | 0-6: Exposed=1.1% vs not exposed=0.6% | | |
| Mediaiii | 7-10: Exposed=61.0% vs not exposed=61.3%, P=NR | | |
| | 7-10. Exposed-01.0 % vs flot exposed-01.3 %, F-NK | | |
| | Persistent pulmonary hypertension, adjusted OR (95% CI), | | |
| | comparison to not exposed: | | |
| | Late exposure: | | |
| | Any SSRI: 2.1 (1.5 to 3.0) | | |
| | Fluoxetine: 2.0 (1.0 to 3.8) | | |
| | , | | |
| | Citalopram: 2.3 (1.2 to 4.1) | | |
| | Paroxetine: 2.8 (1.2 to 6.7) | | |
| | Sertraline: 2.3 (1.3 to 4.4) | | |
| | Escitalopram: 1.3 (0.2 to 9.5) | | |
| | Early exposure: | | |
| | Any SSRI: 1.4 (1.0 to 2.0) | | |
| | Fluoxetine: 1.3 (0.6 to 2.8) | | |
| | Citalopram: 1.8 (1.1 to 3.0) | | |
| | Paroxetine: 1.3 (0.5 to 3.5) | | |
| | Sertraline: 1.9 (1.0 to 3.6) | | |
| | Escitalopram: 0.3 (0.0 to 2.2) | | |
| Kornum, 2010 ³⁴ | Escitalopram (n=5): OR, 2.0; 95% CI, 0.8 to 4.9 | NR | NR |
| Denmark | Non-SSRI antidepressant (n=6): OR, 0.6; 95% CI, 0.3 to 1.3 | | |
| PBR | | | |
| Medium | Cardiac malformations: | | |
| | Any SSRI (n=26): OR, 1.7; 95% CI, 1.1 to 2.5 | | |
| | Fluoxetine (n=6): OR, 1.9; 95% CI, 0.8 to 4.3 | | |
| | Sertraline (n=7): OR, 3.0; 95% CI, 1.4 to 6.4 | | |
| | Paroxetine (n=1): OR, 0.5; 95% CI, 0.1 to 3.6 | | |
| | Citalopram (n=6): OR, 1.1; 95% CI, 0.5 to 2.7 | | |
| | Escitalopram (n=3): OR, 3.3; 95% CI, 0.8 to 13.4 | | |
| | Non-SSRI antidepressant (n=0) | | |
| | | | |
| | Septal heart defects: | | |
| | Any SSRI (n=18): OR, 1.4; 95% CI, 0.8 to 2.3 | | |
| | Fluoxetine (n=4): OR, 1.6; 95% CI, 0.6 to 4.4 | | |
| | Sertraline (n=6): OR, 3.3; 95% CI, 1.5 to 7.5 | | |
| | Paroxetine (n=1): OR, 0.7; 95% CI, 0.1 to 4.6 | | |
| | Citalopram (n=2): OR, 0.3; 95% CI, 0.0 to 2.1 | | |
| | Escitalopram (n=3): OR, 4.2; 95% CI, 1.0 to 17.1 | | |
| | Non-SSRI antidepressant (n=0) | | |

| Author, year Country Study Design/Data source Risk of Bias Laine 2003 ³⁵ Finland | 7. Fetus/infant/child outcomes up to 12 months of age Pregnancy and delivery outcomes: mean (SD) or median (range), exposed vs controls | 8. Child outcomes after 12 months of age NR | 9. Maternal Outcomes NR |
|---|--|---|----------------------------|
| Prospective cohort/Data Source[PC] | Duration of pregnancy (days): 274 (251-291) vs. 279 (254-289) Mode of delivery: (number of patients) Vaginal 16 vs 17 Cesarean 4 vs 3 | | |
| | Weight at birth 3455 g (457) vs 3534 g (438) Total infant weight at 2 months 5423g (476) vs 5458g (626) Full breastfeeding 9 weeks (0-43) vs 9 weeks (0-26) Total breastfeeding 17 weeks (0-52) vs 24 weeks (2-52) | | |
| Latendresse, 2011 ³⁶ U.S. PS Medium | Comparison to the unexposed OR, 95% CI: SSRI use and prediction of preterm birth 11.7 (2.2 to 60.7), p=0.004 | NR | NR |

| Author, year | | | |
|-------------------------------|--|--|----------------------|
| Country | | | |
| Study Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Lennestal, 2007 ³⁷ | ORs for Birth Outcomes for singleton births, vs. all deliveries in | NR | NR |
| Sweden | the register | | |
| PBR Medium | Preterm birth (<37 wk.) SNRI/NRI exposure: OR, 1.60; 95%CI, 1.19 to 2.15 | | |
| Medium | SSRI exposure: OR, 1.24; 95%CI, 1.11 to 1.39 | | |
| | - CONTROL ON, 1121, 007001, 1111 to 11.00 | | |
| | Low birth weight (<2500 g) | | |
| | SNRI/NRI exposure: OR, 1.12; 95%CI, 0.74 to 1.68 | | |
| | SSRI exposure: OR, 1.06; 95%CI, 0.92 to 1.23 | | |
| | Small for GA (≤2 SD) | | |
| | SNRI/NRI exposure: OR, 0.68; 95%CI, 0.37 to 1.24 | | |
| | SSRI exposure: OR, 0.99; 95%CI, 0.83 to 1.18 | | |
| | Large for GA (>2 SD) | | |
| | SNRI/NRI exposure: OR, 1.02; 95%CI, 0.70 to 1.49 | | |
| | SSRI exposure: OR, 1.14; 95%CI, 1.02 to 1.28 | | |
| | OD /D leting Bisley for New years to Discourse by a supplying the supply | | |
| | ORs/Relative Risks for Neonatal Diagnoses by exposure, vs. all deliveries in the registry | | |
| | Respiratory problems* | | |
| | SNRI/NRI exposure | | |
| | Early: OR, 1.39; 95%CI, 0.99 to 1.96 | | |
| | Late: RR, 2.01; 95%CI, 0.96 to 3.69 SSRI exposure | | |
| | Early: OR, 1.17; 95%CI, 1.03 to 1.23 | | |
| | Late: OR, 1.72; 95%CI, 1.41 to 2.11 | | |
| | | | |
| | Low Apgar score (<7 at 5 min) SNRI/NRI exposure | | |
| | Early: RR, 1.54; 95%CI, 0.74 to 2.84 | | |
| | Late: RR, 1.71; 95%CI, 0.21 to 6.17 | | |
| | SSRI exposure | | |
| | Early: OR, 1.35; 95%Cl, 1.08 to 1.68 | | |
| | Late: OR, 2.22; 95%CI, 1.58 to 3.12 | | |
| | Hypoglycemia | | |
| | SNRI/NRI exposure | | |
| | Early: OR, 1.42; 95%CI, 1.00 to 1.99 | | |
| | Late: RR, 2.11; 95%CI, 1.01 to 3.89 SSRI exposure | | |
| | Early: OR, 1.17; 95%CI, 1.02 to 1.33 | | |
| | Late: OR, 1.32; 95%CI, 1.05 to 1.68 | | |
| | Namedal commissions | | |
| | Neonatal convulsions SNRI/NRI exposure | | |
| | Early: RR, 0.71; 95%CI, 0.02 to 3.95 | | |
| | Late: RR, 4.55; 95%CI, 0.12 to 25.3 | F-72 | |
| | SSRI exposure | 1'-/2 | |
| | Early: OR, 1.39; 95%Cl, 0.85 to 2.26 Late: OR, 2.94; 95%Cl, 1.34 to 5.58 | | |
| | Late. On, 2.34, 30 %OI, 1.34 to 3.30 | | |

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| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Levinson-Castiel, | Infants exposed to SSRI vs no SSRI | NR | NR |
| 2006 ³⁸ | Congenital anomalies: 5% vs 1.7%, p=0.60 | | |
| Israel | Head circumference, cm, mean (SD): 34.0 (1.2) vs 34.1 (1.2), | | |
| PC, PBD | p=0.65 | | |
| Medium | % of patients with NAS: 30% vs 0%, p<0.001 | | |
| | Symptoms of NAS | | |
| | High-pitched cry: 30% vs 0% | | |
| | Sleep disturbances: 35% vs 3% | | |
| | Exaggerated moro reflex: 0.5% vs 0% | | |
| | Tremor: 61.7% vs 18.3% | | |
| | Hypertonicity or myoclonus: 23% vs 1.7% | | |
| | Convulsions: 3% vs 0% | | |
| | Sweating: 1.7% vs 0% | | |
| | Fever: 1.7% vs 0% | | |
| | Autonomic nervous system: 6.7% vs 3.3% | | |
| | Tachypnea: 20% vs 0% | | |
| | GI disturbance: 56.7% vs 3.3% | | |
| | Mean duration of hospital stay for neonates with severe NAS | | |
| | (n=8) exposed to SSRI: 5.3 days | | |
| Lewis 2010 ³⁹ | Unadjusted ORs (95% CI) for medication vs control | NR | NR |
| Australia | Clinical range for low birth weight: 8.33 (1.11-62.67) | | |
| PC-Clinic | Clinical range for prematurity: 4.51 (0.47-43.41) | | |
| Medium | | | |
| | Birth means: | | |
| | Gestational age, weeks: 38.86 vs 39.86; P=0.005 | | |
| | Weight, g: 3273.65 vs 3671.19; P=0.010 | | |
| | Length, cm: 49.30 vs 51.44; P=0.001 | | |
| | Head circumference, cm: 34.10 vs 34.87, P=0.084 | | |
| | , | | |
| | One month: | | |
| | Age (days): 31.05 vs 28.55, P=0.038 | | |
| | Weight, g: 4032.05 vs 4582.95, P=0.006 | | |
| | Length, cm: 53.34 vs 54.70, P=0.042 | | |
| | Head circumference, cm: 36.96 vs 37.64, P=0.089 | | |
| | · · · · · · · · · · · · · · · · · · · | | |
| | Mean rates of change over 1 month: | | |
| | Change in weight (g d -1): 22.71 vs 31.81, P=0.02 | | |
| | Change in length (mm d -1): 1.26 vs 1.15, P=0.590 | | |
| | Change in head circumference (mm d-1): 0.84 vs 0.86, P=0.800 | | |

| Author, year Country Study Design/Data source | | | |
|---|---|--|---|
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Logsdon, 2011 ⁴⁰ | NR | NR | Inventory of Functional Status after |
| US, Pennsylvania | | | Childbirth Scale: |
| PC | | | NSD between groups: p=0.0549 |
| Medium | | | 0 |
| | | | Significant interaction with time: |
| | | | All groups, M(SD): p<0.0001 |
| | | | 2-week, 2.9 (0.4); 12-week, 3.2(0.3); 26- |
| | | | week, 3.2(0.2); 52-week, 3.5(0.4) |

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| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Louik 2007 ⁴¹ | Adjusted ORs and 95% CI [Reference group-all women not | NR | NR |
| US | exposed to any antidepressant] | | |
| CC | Any SSRI vs Fluoxetine vs Sertraline vs Paroxetine vs | | |
| | Citalopram vs No-SSRI antidepressant | | |
| | SSRIs in relation to outcomes previously reported to be | | |
| | associated with SSRI use | | |
| | Reference group-Women not exposed to any antidepressant | | |
| | Craniosynostosis: 0.8 (0.2 to 3.5) vs none vs 1.8 (0.2 to 14.9) vs | | |
| | 1.7 (0.2 to 14.4) vs none vs none | | |
| | Omphalocele: 1.4 (0.4 to 4.5) vs none vs 5.7 (1.6 to 20.7) vs | | |
| | none vs none vs 1.2 (0.2 to 9.3) | | |
| | (0.2.00) | | |
| | Any cardiac defect: 1.2 (0.9 to 1.6) vs 0.9 (0.6 to 1.5) vs 1.5 (0.9 | | |
| | to 2.6) vs 1.4 (0.8 to 2.5) vs 0.7 (0.2 to 2.1) vs 0.8 (0.5 to 1.5) | | |
| | Conotruncal defects: 1.2 (0.6 to 2.1) vs 1.3 (0.5 to 3.2) vs 0.7 | | |
| | (0.2 to 3.3) vs 1.7 (0.6 to 5.1) vs none vs 0.8 (0.5 to 1.5) | | |
| | Right ventricular outflow tract obstruction defects: 2.0 (1.1 to | | |
| | 3.6) vs 1.0 (0.2 to 3.4) vs 2.0 (0.6 to 6.8) vs 3.3 (1.3 to 8.8) vs | | |
| | none vs 0.9 (0.2 to 3.8) | | |
| | Left ventricular outflow tract obstruction defects: 1.6 (0.9 to | | |
| | 2.9) vs 1.6 (0.6 to 4.0) vs 1.9 (0.6 to 5.8) vs 0.5 (0.1 to 3.9) vs 3.3 | | |
| | (0.7 to 16.0) vs 0.6 (0.1 to 2.4) | | |
| | Septal defects: 1.2 (0.8 to 1.8) vs 1.0 (0.5 to 2.2) vs 2.0 (1.2 to | | |
| | 4.0) vs 0.8 (0.3 to 2.2) vs 0.8 (0.2 to 4.0) vs 1.1 (0.6 to 2.4) | | |
| | , (((| | |
| | SSRI in relation to outcomes not previously reported to be | | |
| | associated with SSRI use | | |
| | Cleft lip with or without cleft palate: 1.5 (0.9-2.5) vs 1.8 (0.8 to | | |
| | 3.8) vs 1.1 (0.3 to 3.8) vs 1.2 (0.4 to 3.6) vs 3.2 (0.9 to 11.9) vs | | |
| | 1.2 (0.2 to 9.3) | | |
| | Pyloric stenosis: 1.1 (0.6 to 1.8) vs 0.9 (0.4 to 2.1) vs 1.7 (0.7 to | | |
| | 4.1) 0.7 (0.2 to 2.6) vs 2.1 (0.4 to 10.4) vs 1.1 (0.5 to 3.1) | | |
| | Renal-collecting-system defects: 1.1 (0.7 to 1.9) vs 1.0 (0.5 to | | |
| | 2.3) vs 1.7 (0.7 to 4.2) vs 1.0 (0.3 to 3.3) vs 1.9 (0.4 to 8.8) vs 0.7 | | |
| | (0.2 to 3.2) | | |
| | Hypospadias: 1.2 (0.6 to2.2) vs 0.7 (0.2 to 2.4) vs 1.2 (0.4 to 4.2) | | |
| | vs 1.0 (0.3 to 3.3) vs 1.9 (0.4 to 8.8) vs 0.7 (0.3 to 2.4) | | |
| | Clubfoot: 2.2 (1.4 to 3.6) vs 0.8 (0.2 to 2.5) vs 2.4 (0.9 to 6.2) vs | | |
| | 5.8 (2.6 to 12.8) vs 2.7 (0.5 to 13.1) vs 1.0 (0.3 to 3.2) | | |

| Author, year | | | |
|--------------------------|---|--|----------------------|
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Louik 2007 ⁴¹ | (CONT) | | |
| US | Cleft palate alone: 0.9 (0.4 to 2.0) vs 1.0 (0.3 to 3.5) vs none vs | | |
| CC | 1.5 (0.4 to 5.3) vs 2.3 (0.4 to 12.6) vs 0.9 (0.3 to 3.2) | | |
| | Undescended testis: 1.3 (0.7 to 2.5) vs 0.4 (0.1 to 2.6) vs none vs | | |
| (CONT) | 2.8 (1.0 to 7.8) vs 3.1 (0.6 to 15.5) vs 0.7 (0.2 to 3.0) | | |
| | Neural-tube defects: 0.6 (0.2 to 1.4) vs none vs 0.8 (0.1 to 6.3) vs | | |
| | 3.3 (1.1 to 10.4) vs none vs 0.6 (0.1 to 2.4) | | |
| | Anal atresia: 1.9 (0.8 to 4.3) vs 1.4 (0.3 to 6.1) vs 4.4 (1.2 to 16.4) | | |
| | vs 1.0 (0.1 to 7.8) vs 3.0 (0.3 to 28.2) vs 2.2 (0.6 to 7.8) Diaphragmatic hernia: 1.8 (0.7 to 4.2) vs 2.0 (0.6 to 6.9) vs 1.5 | | |
| | (0.2 to 11.5) vs 1.2 (0.2 to 8.9) vs none vs 1.1 (0.3 to 5.1) | | |
| | Limb-reduction defects: 1.7 (0.9 to 3.4) vs 1.7 (0.5 to 5.7) vs 3.9 | | |
| | (1.1 to 13.5) vs 1.0 (0.1 to 8.3) vs 4.0 (0.5 to 33.9) vs 0.7 (0.7 to | | |
| | 5.2) | | |
| Lund, 2009 ⁴² | Comparisons to women with no exposure, adjusted OR (95% CI) | NR | NR |
| Denmark | Preterm delivery: 2.02 (1.29 to 3.16) | THE | IVIX |
| PC | Birth weight<2500g: 0.63 (0.15-2.67) | | |
| Medium | NICU admission:2.39 (1.69 to 3.39) | | |
| Modium | 11100 daminoson.2.00 (1.00 to 0.00) | | |
| | Adjusted difference (95% CI) | | |
| | Gestational age, days: -4.5 (-6.2 to -2.8) | | |
| | Birth weight, g: 21 (-51 to 94) | | |
| | Head circumference: -0.0 (-0.2 to 0.2) | | |
| Malm, 2011 ⁴³ | Adjusted OR for risk of major congenital anomalies, any SSRI (n, | NR | NR |
| Finland | offspring=6,976): | | |
| TIS | | | |
| Low | Overall Congenital Anomalies: OR, 1.08; 95%CI, 0.96 to 1.22 | | |
| | CV Anomalies: | | |
| | All major CV anomalies: OR, 1.09; 95%CI, 0.90 to 1.32 | | |
| | Organ system-specific anomalies: | | |
| | CNS: OR, 1.03; 95%CI, 0.68 to 1.57 | | |
| | Neural tube defects: OR, 1.85; 95%CI, 1.07 to 3.20 | | |
| | Respiratory tract: OR, 0.61; 95%CI, 0.28 to 1.30 | | |
| | Cleft lip with or without cleft palate: OR, 0.62; 95%Cl, 0.25 to 1.51 | | |
| | 1.51 Cleft palate: OR, 1.18; 95%Cl, 0.67 to 2.08 | | |
| | Digestive system: OR, 0.87; 95%CI, 0.54 to 1.38 | | |
| | Urogenital: OR, 1.09; 95%CI, 0.80 to 1.50 | | |
| | Musculoskeletal: OR, 0.96; 95%CI, 0.80 to 1.30 | | |
| | Omphalocele: OR, 0.47; 95%CI, 0.11 to 1.94 | | |
| | Craniosynostosis: OR, 1.53; 95%CI, 0.61 to 3.87 | | |
| | Graniusynusiusis. UR, 1.33, 33%Gi, 0.01 to 3.01 | | |

| Author, year Country Study Design/Data source Risk of Bias McFarland, 2011 ⁴⁴ US, Rhode Island PC Medium Merlob, 2009 ⁴⁵ Israel TIS Medium | 7. Fetus/infant/child outcomes up to 12 months of age NR SSRI vs. Controls Nonsyndromic congenital heart malformations: N= 8/235 (3.4%) vs. 1,083/67,636 (1.60%); p=0.023 Risk of mild congenital heart defects: RR, 2.17; 95% CI, 1.07 to 4.39) | 8. Child outcomes after 12 months of age NR NR | 9. Maternal Outcomes NSD for SRI use on Maternal Fetal Attachment Scale total score, p<0.66 NR |
|--|--|--|--|
| Misri 2006 ⁴⁶ Canada PC-Clinic Medium | NR | Internalizing behaviors at age 4 years, ORs (95% CI): All exposed (including clonazepam) vs unexposed Maternal depression-controlled (parent/caregiver): Emotionally reactive: 1.73 (0.25-11.80)/0.56 (0.08-4.01) Anxious/depressed: Parent NR/2.70 (0.25-29.30) Somatic complaints: 0.18 (0.02-1.48)/Caregiver NR Withdrawn: 1.23 (0.09-17.40)/Caregiver NR Total internalizing problems: 0.99 (0.13-7.88/2.85 (0.26-31.20) Clinician's ratings: Irritability=0.65 (0.07-5.69), Withdrawal=2.45 (0.60-10.00), positivity=0.46 (0.10-1.98) Maternal anxiety-controlled (parent/caregiver): Emotionally reactive: 2.10 (0.33-13.40)/0.44 (0.06-3.19) Anxious/depressed: Parent NR/3.21 (0.31-33.70) Somatic complaints: 0.32 (0.06-1.84)/Caregiver NR Withdrawal: 1.74 (0.15-20.10)/Caregiver NR Total internalizing problems: 1.08 (0.15-7.89)/3.45 (0.32-36.80) Clinician's ratings: Irritability=0.64 (0.08-5.51), wd=2.43 (0.59-9.84), positivity=0.46 (0.11-1.93) SSRIs only vs SSRIs plus clonazepam: Maternal depression-controlled (parent/caregiver): Emotionally reactive: 1.63 (0.23-11.80)/8.00 (0.25-255.00) Anxious/depressed: 1.67 (0.17-16.70)/1.29 (0.13-12.90) Somatic complaints: 4.79 (0.36-64.50)/Caregiver NR Withdrawn: 2.26 (0.15-34.20)/Caregiver NR Total internalizing problems: 4.60 (0.36-57.90)/1.53 (0.15-15.60) Clinician's ratings: Withdrawal=0.89 (0.15-5.06), positivity=4.57 (0.65-31.90) >Maternal anxiety-controlled (parent/caregiver): Emotionally reactive: 1.46 (0.20-10.50)/6.00 (0.18-196.00) Anxious/depressed: 1.32 (0.14-12.60/1.57 (0.15-16.20) Somatic complaints: 4.09 (0.29-56.30)/Caregiver NR Withdrawn: 2.00 (0.13-29.80)/Caregiver NR Withdrawn: 2.00 (0.13-29.80)/Caregiver NR Withdrawn: 2.00 (0.13-29.80)/Caregiver NR | NR |

| Author, year Country Study Design/Data source Risk of Bias Misri 2010 ⁴⁷ Canada PC-Clinic Medium | 7. Fetus/infant/child outcomes up to 12 months of age NR | 8. Child outcomes after 12 months of age NR | 9. Maternal Outcomes Exposure to prenatal SSRIs and SNRIs was not a significant predictor of parenting stress at 3-months or 6-months: β (P) Model 1: -0.145 (0.209)/-0.024 (0.843) |
|---|--|---|---|
| Mulder 2011 ⁴⁸ The Netherlands Prospective cohort/Data Source[PC] | (control vs. previously exposed vs. exposed) Birth weight in grams: mean (SD) 3463 (444) vs. 3392 (561) vs. 3395 (584) | NR | Model 2: -0.086 (0.438)/0.038 (0.743) NR |
| Medium | % with delivery at < 37 weeks: 0% vs. 5.4% vs. 8.3% Weeks gestation at delivery: mean (SD) 40.0 (1.1) vs. 39.4 (1.9) vs. 39.1 (2.1) | | |

| Author, year Country Study Design/Data source | | | |
|---|---|--|--------------------------|
| Risk of Bias Nakhai-Pour, | 7. Fetus/infant/child outcomes up to 12 months of age Risk of spontaneous abortion (Adjusted OR) | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes NR |
| 2010 ⁴⁹ | raisk of sportaneous abortion (Aujusted Ort) | TVIX | NIX |
| Canada CC Low | Duration of exposure during year before pregnancy vs. no exposure: 1 month., OR, 1.18; 95% CI, 0.95 to 1.45; 2-6 month., OR, 0.98; 95% CI, 0.80 to 1.21; >6 month., OR, 0.72; 95% CI, 0.54 to 0.95. Use from first day of gestation to index date vs. no use: OR, 1.68; 95% CI, 1.38 to 2.06 Class of antidepressant vs. no use: SSRI alone, OR, 1.61; 95% CI, 1.28 to 2.04; Tricyclic antidepressant alone, OR, 1.27; 95% CI, 0.85 to 1.91; Serotonin-norepinephrine reuptake inhibitor alone, OR, 2.11; 95% CI, 1.34 to 3.30; Other (serotonin modulators, monoamine oxidase inhibitors, tetracyclic perazino-azepines, dopamine and norepinephrine reuptake inhibitors), OR, 1.53; 95% CI, 0.86 to 2.72; Combined use of ≥ 2 classes of antidepressants, OR, 3.51; 95% CI, 2.20 to 5.61. Type of SSRI vs. no use: Paroxetine, OR, 1.75; 95% CI, 1.31 to 2.34; Sertraline, OR, 1.33; 95% CI, 0.85 to 2.08; Fluoxetine, OR, 1.44; 95% CI, 0.86 to 2.43; Citalopram, OR, 1.55; 95% CI, 0.89 to 2.68; Fluoxamine, OR, 2.19, 95 CI, 0.79 to 6.08; Venlafaxine, OR, 2.11; 95% CI, 1.34 to 3.30; Combined use of ≥ 2 SSRIs, OR, 2.47; 95% CI, 0.62 to 9.83. | | |

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| Author, year | | | |
| Country | | | |
| Study Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Nordeng, 2012 ⁵⁰ | Any malformation/Major malformation/CV malformation, Adjusted | NR | NR |
| Norway | OR (95% CI) | | |
| PBR | Nonexposed: Reference | | |
| Medium | Prior-only group: 1.14 (0.86, 1.51)/1.12 (0.78, 1.62)/0.69 (0.31, | | |
| | 1.55) | | |
| | Any antidepressant: 1.09(0.74, 1.62)/0.96 (0.55, 1.69)/1.24 (0.55, | | |
| | 2.82) | | |
| | SSRIs: 1.22 (0.81, 1.84)/1.07 (0.60, 1.91)/1.51 (0.67, 3.43) | | |
| | Citalopram/escitalopram: 1.47 (0.88, 2.46)/0.99 (0.44, 2.25)/1.51 | | |
| | (0.48, 4.77) Sertraline: 0.93 (0.34, 2.53)// | | |
| | Paroxetine: 0.95 (0.34, 2.35)//- | | |
| | Fluoxetine: 2.17 (0.47, 5.06)// | | |
| | | | |
| | Preterm birth, Adjusted OR (95% CI) | | |
| | Prior-only group: 1.12 (0.84, 1.49) | | |
| | Any antidepressant during pregnancy: 1.21(0.87, 1.69) | | |
| | SSRI during pregnancy: 1.28 (0.90, 1.84) | | |
| | Depressive symptoms week 17: 1.13 (1.03, 1.25) | | |
| | Low birthweight, Adjusted OR (95% CI) | | |
| | Prior-only group: 0.93 (0.55, 1.58) | | |
| | Any antidepressant during pregnancy: 0.62 (0.33, 1.16) | | |
| | SSRI during pregnancy: 0.64 (0.32, 1.26) | | |
| | Depressive symptoms week 17: 1.12 (0.95, 1.32) | | |
| Nulman, 200283 | NR | Cognitive outcomes (at 15-71 months) of children of women who | NR |
| Canada | | took tricyclic antidepressants or fluoxetine throughout pregnancy: | |
| PC | | No difference in global IQ between antidepressant groups or | |
| Medium | | nondepressed comparison women as measured by either Bayley | |
| | | or McCarthy test), | |
| | | Children in the tricyclic antidepressant group scored slightly higher on the Reynell Developmental Language Scales, but all 3 | |
| | | groups scored within the normal range. | |
| | | Multiple regression analysis showed the duration of maternal | |
| | | depression was a significant negative predictor of McCarthy | |
| | | global cognitive index. Antidepressant drugs themselves did not | |
| | | predict cognitive achievement. | |
| | | Number of depressive episodes after delivery had a negative | |
| | | relationship with language scores. | |
| | | Treatment for maternal depression was a positive predictor for | |
| | | language development. | |
| | | No differences among the 3 groups across 9 temperament scales (P=0.83) or 3 behavioral scales (P=0.83) of the Child Behavior | |
| | | Checklist. | |
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| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Oberlander 2002 ⁵² | (exposed vs. exposed vs. control) | NR | Breastfeeding: |
| Canada | Birth age: mean (SE) | | N= 17 vs. 13 vs. 20 |
| Prospective | 39.5 (37.3-42.0) vs. 39.6 (37.6-41.6) vs. 39.2 (37.0-41.6) | | |
| cohort/Data | Disth socialities assess (CE) | | |
| Source [PC] | Birth weight in grams: mean (SE) | | |
| Medium | 3401 (2703-4270) vs. 3490 (2865-4240) vs.3485 (2690-4150) | | |
| | Head circumference: | | |
| | 34.3 (32-37) vs. 34.53 (uninterpretable in table 1) vs. 35.0 (38.5- | | |
| | 32) | | |
| | 02) | | |
| | Length: | | |
| | 51.84 (47-64) vs. 51.5(49-54.5) vs. 51.6(47-57) | | |
| Oberlander, | Outcome Mean, Depressed, with SSRI vs. Depressed, No SSRI | NR | NR |
| 2006 ⁵³ | vs. Not depressed, No SSRI; Difference score (95% CI), | | |
| Canada, British | Depressed, with SSRI vs. Depressed, No SSRI | | |
| Columbia | | | |
| PBR | Birth Weight, g: 3397 vs. 3429 vs. 3453; Difference, -32; 95%Cl, - | | |
| Medium | 1 to -64; p=0.05 | | |
| | GA: 38.8 vs. 39.1 vs. 39.2; Difference, -0.35; 95%CI, -0.2 to - | | |
| | 0.45; p<0.001 | | |
| | Preterm birth (<37weeks): 0.090 vs. 0.065 vs. 0.059; Difference, | | |
| | 0 .02; 95%CI, 0.009 to 0.04; p<0.001 | | |
| | Birth Weight <10th %: 0.085 vs. 0.081 vs. 0.074; Difference, 0.0005; 95%Cl, -0.01 to 0.02; p=0.51 | | |
| | Length of hospital stay, days: 3.31 vs. 2.88 vs. 2.76; Difference, | | |
| | 0.43; 95%CI, 0.12 to 0.74; p=0.007 | | |
| | Respiratory Distress: 0.139 vs. 0.078 vs. 0.074; Difference, | | |
| | 0.063; 95%CI, 0.042 to 0.079; p<0.001 | | |
| | Feeding Problems: 0.039 vs. 0.024 vs. 0.021; Difference, 0.015; | | |
| | 95%CI, 0.005 to 0.025; p=0.002 | | |
| | Jaundice: 0.094 vs. 0.075 vs. 0.079; Difference, 0.019; 95% CI, | | |
| | 0.003 to 0.034; Convulsions: 0.0014 vs. 0.0009 vs. 0.0011; | | |
| | p=0.64 | | |
| | | | |
| | Propensity Score Matching: only birth weight <10th % | | |
| | (Difference, 0.033; 95%CI, 0.007 to 0.059; p=0.02) and | | |
| | respiratory distress (Difference, 0.044; 95%CI, 0.013 to 0.077; | | |
| | p=0.006) remained significantly different. | | |

| Author, year Country Study Design/Data source Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
|---|---|--|----------------------|
| Oberlander, 2008 55 Canada, British Columbia PC Medium | SRI Exposed vs. Not Exposed GA, weeks: 39.34 vs. 40.14, p<0.05 Birth weight, g: 3404.95 vs. 3605.94, NSD Small for GA: 3 vs. 1, NSD Apgar, 1 minute (M): 7.54 vs. 8.13, NSD, not moderated by SLC6A4 genotype. Apgar, 5 minutes (M): 8.70 vs. 9.06, p<0.05, significant | NR | NR |
| | interaction between SRI exposure and SLC6A4 genotype (F=3.28, P=0.043); | | |

| Author, year | | | |
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| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Oberlander, 2008 ⁵⁵ (Birth Defects Res Part B) | Adjusted risk differences, exposure group compared to no exposure group Major Congenital Anomalies, adjusted risk difference (95% CI) | NR | NR |
| Canada, British Columbia PBR | SRIs only: -0.61 (-1.44 to 0.21) SRIs + benzodiazepines: 1.65 (-0.49 to 3.79) | | |
| Medium | CV Congenital Defects, adjusted risk difference (95% CI) SRIs only: 0.21 (-0.14 to 0.56) SRIs + benzodiazepines: 1.18 (0.18 to 2.18) | | |
| | Ventricular Septal Defects, adjusted risk difference (95% CI) SRIs only: 0.10 (-0.12 to 0.33) SRIs + benzodiazepines: 0.35 (-0.26 to 0.9) | | |
| | Atrial Septal Defects, adjusted risk difference (95% CI) SRIs only: 0.21 (0.05 to 0.36) SRIs + benzodiazepines: -0.01 (-0.31 to 0.30) | | |
| | SRI monotherapy Major Congenital Anomalies, adjusted risk difference (95% CI) Citalopram: 0.40 (-3.13 to 3.93) Fluoxetine: -0.26 (-1.68 to 1.17) Fluvoxamine: -1.52 (-4.02 to 0.98) Paroxetine: -0.56 (-1.70 to 0.59) Sertraline: -0.41 (-1.84 to 1.02) Venlafaxine: -1.18 (-3.20 to 0.84) | | |
| | SRI monotherapy CV Congenital Defects, adjusted risk difference (95% CI) Citalopram: 2.28 (0.19 to 4.36) Fluoxetine: 0.08 (-0.54 to 0.70) Fluvoxamine: -0.55 (-1.45 to 0.36) Paroxetine: 0.12 (-0.38 to 0.62) Sertraline: -0.09 (-0.65 to 0.47) | | |
| | Venlafaxine: 0.01 (-0.77 to 0.79) | | |

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| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Okun, 2011 ⁵⁶ | NR . | NR | Mean depression ratings: |
| US, Ohio and | | | 3 |
| Pennsylvania | | | Hamilton Rating Scale for Depression, SSRI |
| PC | | | vs. No SSRI (depressed and non- |
| Medium | | | depressed): |
| Mediaiii | | | Week 20: 6.6 vs. 5.1, p=0.01 |
| | | | Week 20: 0.0 vs. 5.1, p=0.01 Week 30: 6.5 vs. 4.1, p=0.0001 |
| | | | |
| | | | Week 36: 6.2 vs. 3.9, p=0.007 |
| | | | Hamilton Dating Coals for Depression |
| | | | Hamilton Rating Scale for Depression, |
| | | | Atypical symptoms: |
| | | | Week 20: 4.0 vs. 3.6, p=0.27 |
| | | | Week 30: 4.2 vs. 3.4, p=0.04 |
| | | | Week 36: 4.0 vs. 3.4, p=0.07 |
| | | | Otherstone distanciant Hamilton Batin a Ocala |
| | | | Structured interview, Hamilton Rating Scale |
| | | | for Depression: |
| | | | Week 20: 10.5 vs. 8.7, p=0.03 |
| | | | Week 30: 10.6 vs. 7.5, p=0.0004 |
| | | | Week 36: 10.2 vs. 7.3, p=0.01 |
| | | | At unical Compatteres (Chaustured interview) |
| | | | Atypical Symptoms/Structured interview, |
| | | | Hamilton Rating Scale for Depression: |
| | | | Week 20: 38.1 vs. 46.9, p=0.01 |
| | | | Week 30: 39.8 vs. 45.4, p=0.07 |
| 01 001057 | | Lup. | Week 36: 44.6 vs. 47.4, p=0.53 |
| Okun, 2012 ⁵⁷ | ORs for pre-term birth compared to No MDD, No SSRI group. | NR | NR |
| US, Ohio and | M/I-00 | | |
| Pennsylvania | Week 20 | | |
| PC | No MDD, taking SSRI: OR, 4.15; 95% CI, 1.43 to 12.0 | | |
| Medium | MDD, No SSRI: OR, 1.45; 95% CI, 0.43 to 4.88 | | |
| | MDD, taking SSRI: OR, 3.76; 95% CI, 1.04 to 13.6 | | |
| | Lw. 1 00 | | |
| | Week 30 | | |
| | No MDD, taking SSRI: OR, 7.93; 95% CI, 2.44 to 25.7 | | |
| | MDD, No SSRI: OR, 1.36; 95% CI, 0.27 to 6.94 | | |
| | MDD, taking SSRI: OR, 5.00; 95% CI, 1.42 to 17.5 | | |

| Author, year Country Study Design/Data source Risk of Bias Palmsten 2012 ⁵⁸ Canada RC-LD Medium | 7. Fetus/infant/child outcomes up to 12 months of age NR | 8. Child outcomes after 12 months of age NR | 9. Maternal Outcomes Preeclampsia, adjusted RR vs unexposed (95% CI): SSRI monotherapy: 1.22 (0.97-1.54) SSRI polytherapy: 1.28 (0.73-2.22) SNRI monotherapy: 1.95 (1.25-3.03) TCA monotherapy: 3.23 (1.87-5.59) Preeclampsia, adjusted RR for continuation |
|--|--|--|---|
| Pearson 2007 ⁵⁹ US, Louisiana Retrospective cohort Data/Source: [AD] Medium | Adjusted for tobacco use, marital status, maternal age, parity. | Exposed vs. Not Exposed N=252 Birth weight: mean (SD) 3.28 (.48) vs. 3.3 (.63) Gestational age wk: mean (SD) 39 (1.7) vs. 38.9 (2.3) Premature delivery: 10.7% vs. 10.1% Caesarean section: 16.7% vs. 26.8% Admission to SCN: 17.9% vs. 10.1% Timely SCN discharge: 73.3 % vs. 10.1% Neonatal outcomes SRIs vs. TCAs: SRIs N=42, TCAs N=37 Low birth weight: 2.4% vs. 5.4% Prematurity: 7.1% vs. 16.2% Admission to SCN: 11.9% vs. 29.7% Timely SCN discharge: 80% vs. 63.6% | NR |
| Pedersen, 2009 ⁶⁰ Denmark PBD, LD Medium | Comparisons to unexposed infants, Adjusted OR (95% CI) Fluoxetine vs citalopram vs paroxetine vs sertraline vs >1 type of SSRI Minor malformations: 0.62(0.20 to 1.93) vs 0.79 (0.33 to 1.91) vs 1.43 (0.64 to 3.22) vs 0.76 (0.24 to 2.37) vs 1.08 (0.34 to 3.38) Cardiac malformations: 0.77 (0.19 to 3.11) vs 1.75 (0.78 to 3.93) vs 0.88 (0.22 to 3.55) vs 2.36 (0.97 to 5.72) vs 3.42 (1.40 to 8.34) Septal heart defects: 1.34 (0.33 to 5.41) vs 2.52 (1.04 to 6.10) vs 0.76 (0.11 to 5.43) vs 3.25 (1.21 to 8.75) vs 4.70 (1.74 to 12.7) Non-cardiac malformations: 1.08 (0.54 to 2.19) vs 0.83 (0.41 to 1.67) vs 1.59 (0.85 to 2.99) vs 1.18 (0.56 to 2.50) vs 0.95 (0.35 to 2.57) | NR | NR |

| Author, year | | | |
|------------------------------|--|--|----------------------|
| Country Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Pedersen, 2010 ⁶¹ | 6 month., Adjusted OR | 19 month., Adjusted OR | NR |
| Denmark | , , | | |
| PC | Achievement of milestones, antidepressants vs. untreated | Antidepressants vs. untreated depression | |
| Medium | depression | Going up stairs with support OR, 1.0; 95% CI, 0.50 to 2.05; | |
| | Head control OR, 1.0; 95% CI, 0.2 to 6.1; | Taking off socks and shoes when asked to OR, 1.1; 95% CI, 0.68 | |
| | Sits with straight back OR, 2.2; 95% CI, 1.0 to 4.8; | to 1.64; | |
| | Rolls from back to belly OR, 1.5; 95% CI, 1.0 to 2.1; | Drinking from ordinary cup without help OR, 3.4; 95% CI, 0.66 to | |
| | Sits without support OR, 1.2; 95% CI, 0.8 to 1.7; | 17.0; | |
| | All motor activity OR, 1.3; 95% CI, 0.9 to 1.5; Throws things on floor OR, 1.7; 95% CI, 0.9 to 2.3; | Being occupied alone for ≥15 min OR, 1.2; 95% CI, 0.72 to 1.87; Bringing things when told to OR, 0.8; 95% CI, 0.28 to 2.45; | |
| | Tries to get things out of reach OR, 1.2; 95% CI, 0.4 to 3.5; | Making marks on table or paper OR, 1.3; 95% CI, 0.59 to 3.07; | |
| | Moves around OR, 1.3; 95% CI, 0.9 to 1.8; | Aligning picture correctly OR, 1.0; 95% CI, 0.68 to 1.42; | |
| | Puts toys in mouth OR, 0.7; 95% CI, 0.1 to 7.4; | Using word-like sounds to tell what he or she wants OR, 1.4; | |
| | Looks after new sounds OR, 5.0; 95% CI, 0.6 to 44.8; | 95% CI, 0.59 to 3.11; | |
| | Makes sounds when playing OR, 1.7; 95% CI, 0.3 to 10.2; | Mentioning ≥25 names of different things OR, 1.7; 95% CI, 0.95 | |
| | Mimics new sounds OR, 1.3; 95% CI, 0.9 to 1.9; | to 3.10; | |
| | Tries to get into contact by sounds OR, 1.4; 95% CI, 0.8 to 2.5; | Using 2-word sentences OR, 1.2; 9% CI, 0.83 to 1.74; | |
| | Shows when not happy OR, 1.1; 95% CI, 0.6 to 1.9; | Failed ≥1 milestone OR, 2.1 95%CI, 0.95 to 4.86 | |
| | Likes to get tossed around OR, 1.1; 95% CI, 0.6 to 2.0; | | |
| | All milestones OR, 1.5; 95% CI, 1.1 to 2.0 | First- trimester antidepressants only vs. untreated depression | |
| | | Going up stairs with support OR, 1.4; 95% CI, 0.41 to 4.82; | |
| | First- trimester antidepressants only vs. untreated depression | Taking off socks and shoes when asked to OR, 1.1; 95% CI, 0.65 | |
| | Head control OR, 0.9; 95% CI, 0.1 to 7.3; Sits with straight back OR, 1.8; 95% CI, 0.7 to 4.6; | to 2.0; Drinking from ordinary cup without help OR, 10.1; 95% CI, 0.20 | |
| | Rolls from back to belly OR, 1.6; 95% CI, 1.0 to 2.4; | to 512: | |
| | Sits without support OR, 0.9; 95% CI, 0.8 to 1.7; | Being occupied alone for ≥15 min OR, 0.9; 95% CI, 0.47 to 1.73; | |
| | All motor activity OR, 1.1; 95% CI, 0.7 to 1.8; | Bringing things when told to OR, 0.2; 95% CI, 0.03 to 1.42; | |
| | Throws things on floor OR, 2.1; 95% CI, 1.0 to 4.4; | Making marks on table or paper OR, 1.6; 95% CI, 0.58 to 4.40; | |
| | Tries to get things out of reach OR, 1.9; 95% CI, 0.6 to 6.1; | Aligning picture correctly OR, 1.1; 95% CI, 0.71 to 1.83; | |
| | Moves around OR, 1.2; 95% CI, 0.8 to 1.7; | Using word-like sounds to tell what he or she wants OR, 0.7; | |
| | Looks after new sounds OR, 4.4; 95% CI, 0.4 to 50.5; | 95% CI, 0.20 to 2.56; | |
| | Makes sounds when playing OR, 1.5; 95% CI, 0.1 to 19.4; | Mentioning ≥25 names of different things OR, 1.2; 95% CI, 0.58 | |
| | Mimics new sounds OR, 1.4; 95% CI, 0.8 to 1.9; | to 2.49; | |
| | Tries to get into contact by sounds OR, 1.4; 95% CI, 0.9 to 3.8; | Using 2-word sentences OR, 1.0; 9% CI, 0.63 to 1.63; | |
| | Shows when not happy OR, 0.8; 95% CI, 0.4 to 1.8; Likes to get | Failed ≥1 milestone OR, 2.3 95%Cl, 0.72 to 7.49 | |
| | tossed around OR, 0.8; 95% CI, 0.3 to 2.4; | | |
| | All milestones OR, 1.1; 95% CI, 0.6 to 2.1 | | |

| Author, year Country Study Design/Data source Risk of Bias Pedersen, 2010 ⁶¹ Denmark | 7. Fetus/infant/child outcomes up to 12 months of age (Cont) Second/Third-trimester antidepressants vs. untreated depression | 8. Child outcomes after 12 months of age (Cont) Second/third trimester antidepressants vs. untreated depression | 9. Maternal Outcomes |
|---|--|---|----------------------|
| PC Medium (CONT) | Sits with straight back OR, 2.7; 95% CI, 0.9 to 8.0; Rolls from back to belly OR, 1.4; 95% CI, 0.9 to 2.3; Sits without support OR, 2.1; 95% CI, 1.2 to 3.6; All motor activity OR, 2.2; 95% CI, 1.2 to 3.8; Throws things on floor OR, 1.3; 95% CI, 0.5 to 3.3; Tries to get things out of reach OR, 0.4; 95% CI, 0.0 to 3.2; Moves around OR, 1.5; 95% CI, 1.0 to 2.4; Mimics new sounds OR, 1.2; 95% CI, 0.7 to 2.1; Tries to get into contact by sounds OR, 1.3; 95% CI, 0.5 to 3.3; Shows when not happy OR, 1.4; 95% CI, 0.7 to 2.9; Likes to get tossed around OR, 1.1; 95% CI, 0.3 to 3.3; All milestones OR, 2.6; 95% CI, 1.2 to 5.8 6 months Sits Without Support Exposure at any point during pregnancy Antidepressants overall OR, 1.2; 95% CI, 0.83 to 1.68; SSRIs overall OR, 1.1 95% CI, 0.76 to 1.64; TCAs OR, 2.9; 95% CI, 0.89 to 9.51 First-trimester exposure only Antidepressants overall OR, 0.9; 95% CI, 0.78 to 1.74; SSRIs OR, 0.7; 95% CI, 0.45 to 1.12; TCAs OR, 2.0; 95% CI, 0.58 to 6.91 Second/third-trimester exposure Antidepressants overall OR, 2.1; 95% CI, 1.23 to 3.60; SSRIs OR, 2.2; 95% CI, 1.25 to 3.89; TCAs NA (n=0) | Going up stairs with support OR, 0.6; 95% CI, 0.11 to 3.46; Taking off socks and shoes when asked to OR, 0.8; 95% CI, 0.45 to 1.53; Drinking from ordinary cup without help OR, 6.2; 95% CI, 0.39 to 98.0; Being occupied alone for ≥15 min OR, 2.1; 95% CI, 1.09 to 4.02; Bringing things when told to OR, 1.3; 95% CI, 0.29 to 5.79; Making marks on table or paper OR, 1.7; 95% CI, 0.52 to 5.76; Aligning picture correctly OR, 0.9; 95% CI, 0.56 to 1.55; Using word-like sounds to tell what he or she wants OR, 1.6; 95% CI, 0.59 to 4.38; Mentioning ≥25 names of different things OR, 2.3; 95% CI, 0.92 to 5.66; Using 2-word sentences OR, 1.6; 9% CI, 0.0.94 to 2.76; Failed ≥1 milestone OR, 2.3 95% CI, 0.72 to 7.49 | |

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|------------------------|---|---|----------------------|
| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Rai 2013 ⁶² | NR | Adjusted OR (95% CI) | NR |
| Sweden | | Autism spectrum disorder | |
| CC | | Any antidepressant use: 1.90 (1.15-3.14) | |
| Low | | Any antidepressant use with depression: 3.34 (1.50-7.47) | |
| | | Any antidepressant use without depression: 1.61 (0.85-3.06) | |
| | | Depression and no antidepressant use: 1.06 (0.68 to 1.66) | |
| | | SSRIs: 1.65 (0.90-3.03) | |
| | | Nonselective MRIs: 2.69 (1.04-6.06) | |
| | | Autism spectrum disorder with intellectual disability | |
| | | Any antidepressant use: 1.09 (0.41-2.88) | |
| | | SSRIs: 1.01 (0.34-2.98) | |
| | | Nonselective MRIs: 1.72 (0.20-15.03) | |
| | | Any antidepressant use with depression: 1.81 (0.39-8.56) | |
| | | Any antidepressant use without depression: 0.93 (0.27-3.21) | |
| | | Depression and no antidepressant use: 1.06 (0.54 to 2.07) | |
| | | Autism spectrum disorder without intellectual disability | |
| | | Any antidepressant use: 2.54 (1.37-4.68) | |
| | | SSRIs: 2.34 (1.09-5.06) | |
| | | Nonselective MRIs: 2.93 (0.98-8.82) | |
| | | Any antidepressant use with depression: 4.94 (1.85-13.23) | |
| | | Any antidepressant use without depression: 2.10 (0.97-4.57) | |
| | | Depression and no antidepressant use: 1.04 (0.57-1.92) | |
| Ramos, 200884 | Adjusted ORs for risk of major congenital malformations | NR | NR |
| Canada, Quebec | | | |
| LD | Timing of antidepressant exposure: | | |
| Medium | First trimester: OR, 1.10; 95%CI, 0.75 to 1.62 | | |
| | Second trimester: OR, 1.13; 95%CI, 0.59 to 2.17 | | |
| | Third trimester: OR, 0.86; 95%CI, 0.45 to 1.65 | | |
| | Duration of antidepressant use during first trimester: | | |
| | 1-30 days: OR,1.23; 95%CI, 0.77 to 1.98 | | |
| | 31–60 days: OR, 1.03; 95%CI, 0.63 to 1.69 | | |
| | ≥61 days: OR, 0.92; 95%Cl, 0.50 to 1.69 | | |
| | Class of antidepressant used during first trimester: | | |
| | Paroxetine: OR, 1.27; 95%CI, 0.78 to 2.06 | | |
| | Other SSRI: OR, 1.19; 95%CI, 0.71 to 1.97 | | |
| | Tricyclic antidepressant: OR, 0.78; 95%CI, 0.30 to 2.02 | | |
| | Other antidepressant: OR, 0.94; 95%CI, 0.51 to 1.75 | | |
| | Co-exposure: OR, 1.03; 95%CI, 0.44 to 2.41 | | |

| Author, year Country Study Design/Data | | | |
|---|---|--|----------------------|
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Ramos, 2010 ⁶⁴ | Adjusted Risk Ratio for Small for GA (birth weight <10th | NR | NR |
| Canada, Quebec | percentile) | | |
| LD, supplemental | by Trimester and class of antidepressant vs. no antidepressants: | | |
| questionnaire | First Trimester: | | |
| Medium | SSRIs: RR, 0.96; 95%CI, 0.74 to 1.25 | | |
| | Tricyclics: RR, 0.84; 95%CI, 0.44 to 1.58 | | |
| | Other antidepressants: RR, 1.17; 95%CI, 0.83 to 1.66 | | |
| | Co-exposure: RR, 0.83; 95%CI, 0.51 to 1.35 | | |
| | Second Trimester: SSRIs: RR, 1.40; 95%CI, 0.96 to 2.02 Tricyclics: RR, 0.69; 95%CI, 0.18 to 2.60 Other antidepressants: RR, 2.25; 95%CI, 1.30 to 3.92 Co-exposure: RR, 3.48; 95%CI, 1.56 to 7.75 | | |
| | Third Trimester: SSRIs: RR, 0.70; 95%CI, 0.48 to 1.01 Tricyclics: RR, 2.12; 95%CI, 0.58 to 7.72 Other antidepressants: RR, 0.47; 95%CI, 0.24 to 0.90 Co-exposure: RR, 0.33; 95%CI, 0.12 to 0.89 | | |
| | Adjusted Risk Ratio for Small for GA by class of antidepressant used during the second trimester in subset of cohort (N=938) SSRIs: RR, 1.40; 95%CI, 0.73 to 2.67 Tricyclics: RR, 0.99; 95%CI, 0.13 to 7.37 Other antidepressants: RR, 2.41; 95%CI, 1.07 to 5.43 Co-exposure: RR, 3.28; 95%CI, 1.28 to 8.45 | | |

| Author, year Country Study Design/Data | | | |
|---|--|--|----------------------|
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Rampono, 2009 ⁶⁵ | Gestational age at delivery, Median (IQR): | NR | NR |
| Australia | Cases: 39 (38-40) | | |
| PC | Controls: 40 (39-40) | | |
| Medium | p<0.05 | | |
| | No significant differences for obstetric outcomes (labor, | | |
| | presentation or delivery mode) or neonatal outcomes (need for | | |
| | resuscitation, birth weight, or head circumference) | | |
| | Neonatal Abstinence: | | |
| | Present in 5% of cases (4% SSRIs, 9% venlafaxine) | | |
| | Maximum neonatal abstinence score on day 1, Median (IQR): Cases: 2 (0-1.05) | | |
| | Cases. 2 (0-1.05) Controls: 0 (0-6) | | |
| | P<0.05 | | |
| | No other differences in mean or maximum NAS scores (days 1-3 | | |
| | Brazelton Neonatal Behavioral Assessment Scale, Mean (SD): | | |
| | Controls/Cases/SSRI/SNRI (higher score indicates better | | |
| | response): | | |
| | Habituation: 7.64 (0.84)/6.57 (1.60)/6.62 (1.80)/6.46 (1.65) | | |
| | Social-interactive: 7.29 (1.12)/6.22 (1.90)/6.10 (2.02)/6.49 (1.63) | | |
| | Motor: 6.13 (0.44)/5.35 (0.59)/5.38 (0.55)/5.27 (0.69) | | |
| | Range: 3.53 (0.75)/3.49 (0.58)/3.47 (0.61)/3.55 (0.52) | | |
| | Regulation: 6.26 (1.00)/5.96 (1.18)/5.91(1.13)/6.09 (1.32) | | |
| | Autonomic: 6.20 (0.68)/5.51 (1.17)/5.52 (0.98)/5.47 (1.59) | | |
| | Reflexes: 0.75 (0.07)/0.73(0.09)/0.74 (0.08)/0.72 (0.11) | | |
| | P<0.05 for controls vs cases for habituation, social-interactive, | | |
| | and autonomic | | |
| | P<0.05 for controls vs SSRI vs SNRI for motor and autonomic | | |

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| Author, year | | | |
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| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Reebye, 200266 | SSRI vs SSRI+ vs nonexposed | NR | SSRI alone vs SSRI plus vs Non-exposed |
| Canada | Bayley scale at 2 months | | Maternal infant positive correlations at 3 |
| PC | Mental development index Mean (SD): 98 (8.1) vs 93 (5.1) vs 96 | | months |
| Medium | (7.5) | | During Feeding |
| | Psychomotor development index Mean (SD): 106 (5.4) vs 102 | | 0.35 vs 0.32 vs 0.58 (p<0.01) |
| | (6.3) vs 101 (7.9) | | sensitivity: 0.40 (p<0.05) vs 0.06 vs -0.02 |
| | Gestational age, wks Mean (SD): 39.5(1.2) vs 39.5 (1.3) vs 39.3 | | During free play |
| | (1.4) | | 0.40 (p<0.05) vs 0.61(p<0.05) vs 0.20 |
| | Birthweight, g Mean (SD): 3364 (408) vs 3515 (452) vs 3414 | | sensitivity: 0.20 vs 0.51(p<0.05) vs -0.13 |
| | (437) | | negativity: -0.26 vs -0.72 (p<0.05) vs -0.08 |
| | (101) | | Intercorelations between parent variable |
| | | | and negative infant affect at 3 months |
| | | | SSRI |
| | | | Negative infant affect vs apathetic mood vs |
| | | | sober mood |
| | | | Feeding Positive maternal affect: -0.21 vs - |
| | | | 0.17 vs 0.01 |
| | | | Free play Positive maternal affect: 0.04 vs - |
| | | | 0.48 (p<0.05) vs -0.55 (p<0.05) |
| | | | Feeding sensitivity: -0.15 vs -0.08 vs -0.14 |
| | | | Free play sensitivity: -0.12 vs -0.38 |
| | | | (p<0.05) vs -0.17 |
| | | | Free play negativity: 0.25 vs 0.14 vs -0.05 |
| | | | SSRI + |
| | | | Negative infant affect vs apathetic mood vs |
| | | | sober mood |
| | | | Feeding Positive maternal affect:-0.57 |
| | | | (p<0.05) vs NR vs -0.26 |
| | | | Free play Positive maternal affect: -0.47 vs |
| | | | -0.23 vs -0.56 (p<0.05) |
| | | | Feeding sensitivity: 0.00 vs NR vs -0.33 |
| | | | Free play sensitivity: -0.15 vs -0.55(p<0.05) |
| | | | vs -0.43 |
| | | | Free play negativity: 0.53 (p<0.05) vs 0.38 |
| | | | vs 0.54 (p<0.05) |
| | | | Nonexposed: Negative infant affect vs |
| | | | apathetic mood vs sober mood |
| | | | Feeding Positive maternal affect: 0.35 vs - |
| | | | 0.33 vs -0.39(p<0.05) |
| | | | Free play Positive maternal affect: -0.18 vs |
| | | | -0.55(p<0.05) vs -0.28 |
| | | | Feeding sensitivity: 0.30 vs 0.14 vs -0.28 |
| | | | Free play sensitivity: -0.15 vs -0.27 vs 0.18 |
| | | | Free play negativity: 0.17 vs 0.31 vs -0.6 |
| | I. | | 1 100 play hogalitity. 0.17 va 0.01 va -0.0 |

| Author, year | | | |
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| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Reis, 2010 ⁶⁷ | Infant characteristics according to antidepressant use later in | NR | Maternal delivery diagnoses after use of |
| Sweden | pregnancy: | IVIX | antidepressants: |
| PBR | | | |
| | TCA/SSRI/SNRI, Adjusted OR (95% CI) | | Early use/Later use/Both early and later |
| Medium | Preterm birth (<37 weeks): | | use, Adjusted OR (95% CI) |
| | 2.36 (1.89, 2.94)/1.46 (1.31, 1.63)/1.98 (1.49, 2.63) | | Preexisting diabetes: |
| | Low birthweight (<2500 gm): | | 1.35 (1.19, 1.52)/1.32 (1.11, 1.58)/ |
| | 1.39 (1.00, 1.95)/1.13 (0.97, 1.31)/1.87 (1.33, 2.64) | | Chronic hypertension: |
| | High birthweight (>4500 gm): | | 1.34(1.18, 1.52)/1.25 (1.04, 1.51)/ |
| | 0.62 (0.40, 0.95)/0.89 (0.70, 1.04)/0.80 (0.53, 1.38) | | Gestational diabetes: |
| | Small for gestational age: | | 1.37 (1.18, 1.58)/1.16 (0.93, 1.45)/1.37 |
| | 0.77 (0.45, 1.32)/1.01 (0.84, 1.22)/1.84 (1.20, 2.81) | | (1.08, 1.75) |
| | Large for gestational age: | | Pre-eclampsia: |
| | 1.12 (0.85, 1.48)/1.06 (0.93, 1.19)/1.23 (0.88, 1.72) | | 1.28 (1.19, 1.37)/1.38 (1.25, 1.53)/1.50 |
| | | | (1.33, 1.69) |
| | Neonatal diagnoses in infants born after maternal antidepressant | | Hyperemesis: |
| | use: | | 1.45 (1.27, 1.66)/1.31 (1.07, 1.60)/1.59 |
| | Early use/Later use/Both early and later use, Adjusted OR (95% | | (1.28, 1.96) |
| | CI) | | Placenta previa: |
| | Hypoglycemia: | | 1.36 (1.20, 1.55)/1.21 (1.00, 1.47)/1.38 |
| | 1.33 (1.22, 1.45)/1.43 (1.31, 1.65)/1.56 (1.36, 1.79) | | (1.11, 1.72) |
| | Respiratory diagnoses: | | Placenta abruption: |
| | 1.34 (1.25, 1.44)/1.62 (1.47, 1.79)/1.65 (1.46, 1.85) | | 1.29 (1.14, 1.47)/1.05 (0.86, 1.29)/1.23 |
| | | | |
| | CNS diagnoses: | | (0.99, 1.53) |
| | 1.31 (1.11, 1.56)/1.50 (1.19, 1.88)/1.49 (1.013, 1.97) | | Premature rupture of membranes: |
| | Jaundice: | | 1.30 (1.18, 1.43)/1.36 (1.19, 1.56)/1.47 |
| | 1.09 (1.01, 1.19)/1.13 (1.01, 1.27)/1.22 (1.06, 1.39) | | (1.26, 1.72) |
| | Intracerebral hemorrhage: | | Bleeding before partus: |
| | 1.17 (0.77, 1.78)/1.28 (0.66, 2.23)/1.20 (0.52, 2.37) | | 1.25 (1.10, 1.42)/1.15 (0.95, 1.39)/1.34 |
| | | | (1.09, 1.66) |
| | | | Bleeding during partus: |
| | | | 1.33 (1.20, 1.46)/1.45 (1.27, 1.65)/1.58 |
| | | | (1.36, 1.84) |
| | | | Bleeding after partus: |
| | | | 1.11 (1.03, 1.19)/1.02 (0.92, 1.14)/1.08 |
| | | | (0.95, 1.22) |
| | | | Induction of delivery: |
| | | | 1.29 (1.22, 1.35)/1.29 (1.19, 1.38)/1.29 |
| | | | (1.18, 1.41) |
| | | | Caesarean section: |
| | | | 1.38 (1.32, 1.44)/1.35 (1.27, 1.44)/1.74 |
| 1 | | | (1.30, 1.51) |
| | | | (1.30, 1.31) |

| Author, year | | | |
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| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Salisbury, 2011 ⁶⁸ | Non-MDD vs. MDD vs. MDD+SRI | NR | NR |
| US, Rhode Island PC Medium | GA at birth: 39.48 vs. 39.66 vs. 38.99, F=3.6, p=0.03 Birth weight, g: 3,553.82 vs. 3,466.95 vs. 3,320, F=2.3, p=0.11 1 min-APGAR, % <8: 10.71% vs. 16.67% vs. 30.57%, x2=5.6, | | |
| | p=0.03 5 min-APGAR, %<9: 5.36% vs. 5.56% vs. 16.67%, x2 3.2, x2= 3.2, p=0.23 | | |
| | NICU network neurobehavioral scores, Non-MDD vs. MDD vs. | | |
| | MDD+SRI; | | |
| | Attention: 5.84 vs. 4.36 vs. 5.96, p=0.00 Quality of Movement: 4.63 vs. 4.82 vs. 4.27, p=0.05 | | |
| | Self-regulation: 5.50 vs. 5.47 vs. 5.27, p=0.67 Handling: 0.38 vs. 0.40 vs. 0.42, p=0.41 | | |
| | Arousal: 4.27 vs. 4.20 vs. 4.04, p=0.03 Excitability: 3.55 vs. 3.17 vs. 3.67, p=0.73 | | |
| | Lethargy: 3.02 vs. 4.24 vs. 3.34, p=1.00 Stress/abstinence signs, total: 0.08 vs. 0.08 vs. 0.11, p=0.10 | | |
| | Stress/abstinence signs, CNS: 0.05 vs. 0.0 vs. 0.13, p=0.00 Nonoptimal reflexes: 1.60 vs. 1.73 vs. 2.17, p=0.41 | | |
| | Asymmetrical reflexes: 0.33 vs. 0.50 vs. 0.56, p=0.72 Hypertonia: 0.05 vs. 0.04 vs. 0.16, p=0.05 | | |
| | Hypotonia: 0.16 vs. 0.05 vs. 0.23, p=0.49 | | |
| Salkeld 2008 ⁶⁹ Canada | NR | NR | Postpartum hemorrhage, multivariate OR (95% CI): |
| CC-LD Low | | | 90-day exposure: SSRI: 1.30 (0.98–1.72) Non-SSRI: 1.12 (0.62–2.01) |
| | | | 30-day exposure: |
| | | | SSRI: 1.33 (0.94–1.89) Non-SSRI: 1.29 (0.58–2.84) |
| | | | 60-day exposure: SSRI: 1.40 (1.04–1.88) Non-SSRI: 1.11 (0.55–2.22) |
| | | | 180-day exposure: SSRI: 1.32 (1.03–1.70) Non-SSRI: 1.04 (0.61–1.75) |

| Author, year | | | |
|--------------------------|--|--|----------------------|
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Simon 2002 ⁷⁰ | Exposed vs unexposed: | NR | NR |
| U.S. | Adjusted difference (95% CI): | INK | INK |
| RC-HCDB | Estimated gestational age (weeks): TCAs= -0.2 (-0.6 to 0.2); | | |
| Low | SSRIs= -0.9 (-1.3 to -0.5); SSRIs in 3rd trimester only= -0.7 (- | | |
| LOW | 1.3 to -0.1); SSRIs in 1st or 2nd trimesters only= -0.9 (-1.5 to - | | |
| | 0.4) | | |
| | Birth weight (g): TCAs= -53 (-167 to 62); SSRIs= -172 (-299 to - | | |
| | 46); SSRIs in 3rd trimester only= -148 (-343 to 48); SSRIs in 1st | | |
| | or 2nd trimesters only= -169 (-336 to -2) | | |
| | Head circumference (cm): TCAs= 0.0 (-0.5 to 0.4); SSRIs= 0.0 (- | | |
| | 1.0 to 1.0) | | |
| | Adjusted OR (95% CI): | | |
| | Estimated gestational age ≤ 36 weeks: TCAs= 1.86 (0.83 to | | |
| | 4.17); SSRIs= 4.38 (1.57 to 12.22) | | |
| | Birth weight <2500 g: TCAs= 1.18 (0.42 to 3.28); SSRIs= 2.73 | | |
| | (0.92 to 8.09) | | |
| | Major malformation: TCAs=0.82 (0.35 to 1.95); SSRIs=1.36 (0.56 | | |
| | to 3.30) | | |
| | Minor malformation: TCAs=0.76 (0.37 to 1.58); SSRIs=1.14 (0.56 | | |
| | to 2.31) | | |
| | Genitourinary malformation: TCAs=0.66 (0.23 to 1.88); SSRIs=1.17 (0.39 to 3.56) | | |
| | Cardiac malformation: TCAs=0.50 (0.05 to 5.53); SSRIs=NA (0 | | |
| | events in unexposed) | | |
| | Skeletal malformation: TCAs=0.80 (0.21 to 3.0); SSRIs=0.24 | | |
| | (0.05 to 1.15) | | |
| | Vascular malformation: TCAs=1.34 (0.30 to 6.06); SSRIs=1.15 | | |
| | (0.41 to 3.23) | | |
| | Craniofacial malformation: TCAs=1.26 (0.33 to 4.75); | | |
| | SSRIs=0.59 (0.14 to 2.52) | | |
| | Seizure disorder: TCAs=NA (0 events in unexposed): | | |
| | SSRIs=4.07 (0.45 to 36.73) | | |
| | Motor delay: TCAs=1.00 (0.14 to 7.17); SSRIs=1.1 3.07 (0.61 to | | |
| | 15.40) | | |
| | Speech delay: TCAs=1.00 (0.14 to 7.17); SSRIs=1.00 (0.14 to | | |
| | 7.18) | | |
| | Other motor abnormality: TCAs=0.49 (0.09 to 2.73); SSRIs=0.50 | | |
| | (0.09 to 2.73) | | |

| Author, year Country Study Design/Data source Risk of Bias Sit, 2011 ⁷¹ US, Pennsylvania PC | 7. Fetus/infant/child outcomes up to 12 months of age OR for Preterm Birth by Maximum depression level: OR, 1.0; 95%CI, 0.8 to 1.2 | 8. Child outcomes after 12 months of age NR | 9. Maternal Outcomes NR |
|--|--|---|----------------------------|
| Medium | ORs for Infant Peripartum Events identified on Peripartum Events Scale by Maximum depression level: > 1 peripartum event: OR, 1.0; 95% CI, 0.8 to 1.2 ≥1 peripartum event: OR, 1.0; 95%CI, 0.9 to 1.2 | | |
| Stephansson, 2013 ⁷² Sweden PBR Medium | Exposure to SSRIs from 3 months before pregnancy until birth, adjusted OR (95% CI) Stillbirth: 1.17 (0.96, 1.41); P=0.12 Stillbirth, no previous psychiatric hospitalization: 1.07 (0.84, 1.36); P=0.59 Stillbirth, previous psychiatric hospitalization: 0.92 (0.66, 1.28); P=0.62 Neonatal death: 1.23 (0.96, 1.57); P=0.11 Neonatal death, no previous psychiatric hospitalization: 1.14 (0.84, 1.56); P=0.39 Neonatal death, previous psychiatric hospitalization: 0.89 (0.58, 1.39); P=0.62 Postneonatal death (28-364 days): 1.34(0.97, 1.86); P=0.08 Postneonatal death, no previous psychiatric hospitalization: 1.10 (0.71, 1.72); P=0.66 Postneonatal death, previous psychiatric hospitalization: 1.02 (0.61, 1.69); P=0.95 | NR | NR |
| | Stillbirth/Neonatal death/Postneonatal death Unexposed: 1.0 (reference) T0: 1.19 (0.87, 1.65); P=0.28/1.04 (0.66, 1.64); P=0.86/1.28 (0.72, 2.26); P=0.40 T0-T1: 1.56 (1.06, 2.30); P=0.03/1.16 (0.61, 2.21); P=0.65/1.02 (0.42, 2.46); P=0.96 T0-T2: 1.11 (0.50, 2.48); P=0.80/1.135 (0.51, 3.62); P=0.55/2.06 (0.66, 6.39); P=0.821 T0-T3: 0.94 (0.53, 1.65); P=0.83/1.56 (0.86, 2.83); P=0.14/1.76 (0.79, 3.93); P=0.17 Other: 1.01 (0.70, 1.46); P=0.94/1.31 (0.85, 2.02); P=0.22/1.31 (0.72, 2.37); P=0.38 | | |

| Author, year Country Study Design/Data source Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
|---|--|--|----------------------|
| Suri, 2007 ⁷³ US, California PC Medium | Birth Outcome Means (unless otherwise specified) by antidepressant use, MDD, with antidepressants vs. MDD, no antidepressants vs. No psychiatric history, no antidepressants: GA, weeks: 38.5 vs. 39.4 vs. 39.7; F=6.0, p=0.004 Birth weight, kg: 3.28 vs. 3.39 vs. 3.36; F=0.47, p=0.63 Apgar, 1 minute: 7.7 vs. 8.2 vs. 8.0; F=1.2, p=0.32 Apgar, 5 minute: 8.8 vs. 9.0 vs. 8.9; F=1.7, p=0.02 Preterm birth: 14.3% vs. 0% vs. 5.3%: χ 2=6.0, p=0.05 Special care nursery: 21% vs. 9% vs. 0%; χ 2=1.8, p=0.40 Birth Outcome Means (unless otherwise specified) by Antidepressant Dose, High vs. Low-Medium vs. None: GA, weeks: 38.2 vs. 38.8 vs. 39.5; F=3.1, p=0.05 Birth weight, kg: 3.29 vs. 3.30 vs. 3.38; F=0.17, p=0.85 | NR | NR |
| | Apgar, 1 minute: 7.3 vs. 8.0 vs. 8.1; F=1.9, p=0.16 Apgar, 5 minute: 8.7 vs. 8.9 vs. 8.9; F==0.82, p=0.44 Preterm birth: 20% vs. 9% vs. 0%; χ 2=4.3, p=0.12 Special care nursery: 26.7% vs. 17.1% vs. 7.1%; χ 2=2.1, p=0.36 | | |

| Author woon | | | |
|--------------------------|--|--|----------------------|
| Author, year | | | |
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Suri, 2011 ⁷⁴ | Delivery Outcomes, MDD with antidepressants vs. MDD no | NR | NR |
| US, California | antidepressants vs. No MDD | | |
| PC | GA, M weeks: 38.1 vs. 39.2 vs. 39.1; F=5.33, p<0.01 | | |
| Medium | Preterm birth <37 weeks: 12% vs. 0% vs. 7%; F=3.34, p=0.19 | | |
| | Birth weight, kg: 3.3 vs. 3.4 vs. 3.3; F=0.46, p=0.63 | | |
| | Apgar, 1 minute, M: 7.8 vs. 8.2 vs. 8.0; F=0.75; p=0.48 | | |
| | Apgar, 5 minute, M: 8.8 vs. 8.9 vs. 9.0; F=1.83, p=0.17 | | |
| | Special care nursery, 18% vs. 12% vs. 0%; x2=4.88, p=0.09 | | |
| | οροσιαί σαι στιαίσσι γ, το 70 το. 1270 το. σ70, χ2 1.00, ρ 0.00 | | |
| | Brazelton Neonatal Behavioral Assessment Scale, Mean scores, | | |
| | MDD with antidepressants vs. MDD no antidepressants vs. No | | |
| | MDD | | |
| | 1 Week of Age: | | |
| | Habituation: 5.90 vs. 7.1 vs. 6.06; F=0.58, p=0.56 | | |
| | Orientation: 4.68 vs. 4.84 vs. 5.01; F= 0.12, p=0.88 | | |
| | | | |
| | Motor: 5.15 vs. 5.31 vs. 5.03; F=0.51, p=0.61 | | |
| | Regulation of state: 5.39 vs. 5.67 vs. 4.61; F=2.12, p=0.13 | | |
| | Range of state: 3.29 vs. 3.68 vs. 3.47; F=0.79, p=0.46 | | |
| | Rapidity of buildup: 2.33 vs. 3.75 vs. 3.18; F=3.28, p=0.05, but | | |
| | NSD after Bonferroni correction | | |
| | Autonomic stability: 7.06 vs. 6.76 vs. 7.41; F=1.29, p=0.28 | | |
| | Reflexes: 2.32 vs. 1.86 vs. 1.86; F=0.70; p=0.50 | | |
| | | | |
| | 6-8 Weeks of Age: | | |
| | Habituation: 6.04 vs. 4.50 vs. 8.75; F=2.16, p=0.16 | | |
| | Orientation: 6.17 vs. 6.87 vs. 6.84; F=1.17, p=0.32 | | |
| | Inanimate auditory: 4.93 vs. 6.10 vs. 6.64; F=4.35, p=0.02, but | | |
| | NSD after Bonferroni correction | | |
| | Motor: 5.89 vs. 6.20 vs. 5.94; F=0.97, p=0.39 | | |
| | Defense: 7.19 vs. 7.00 vs. 6.31; F=3.39, p=0.04, but NSD after | | |
| | Bonferroni correction | | |
| | Range of state: 3.14 vs. 3.25 vs. 3.42; F=0.38, p=0.68 | | |
| | Autonomic stability: 7.48 vs. 7.67 vs. 7.61; F=0.31, p=0.74 | | |
| | Reflexes: 3.13 vs. 2.46 vs. 1.92; F=1.65, p=0.20 | | |

| Author, year Country Study Design/Data source Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
|---|---|--|---|
| Toh, 2009 ⁷⁵ US | NR | NR | Any gestational hypertension, Adjusted RR (95% CI) |
| CC | | | No SSRI exposure: Reference |
| Medium | | | SSRI exposure: 1.90 (1.35, 2.67) |
| | | | Discontinued SSRI exposure: 1.33 (0.78, |
| | | | 2.27) Continued SSRI exposure: 2.49 (1.62, 3.83) |
| | | | Gestational hypertension with |
| | | | preeclampsia, Adjusted RR (95% CI) |
| | | | SSRI exposure: 3.16 (1.89, 5.29) |
| | | | Discontinued SSRI exposure: 1.37 (0.50, |
| | | | 3.76) |
| | | | Continued SSRI exposure: 4.86 (2.70, 8.76) |
| | | | Gestational hypertension without |
| | | | preeclampsia, Adjusted RR (95% CI) SSRI exposure: 1.36 (0.85, 2.15) |
| | | | Discontinued SSRI exposure: 1.30 (0.69, |
| | | | 2.46) |
| | | | Continued SSRI exposure: 1.41 (0.74, 2.69) |

| Author, year Country Study | | | |
|---|---|--|----------------------|
| Design/Data source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Ververs, 2009 ⁷⁶ the Netherlands | RRs, Healthcare utilization, vs. non-users | NR NR | NR |
| AD | >First 2 Weeks of Life | | |
| Medium | GP visits, ≥1 | | |
| | Continuous: RR, 0.9; 95%CI, 0.5 to 1.6 | | |
| | Irregular: RR, 0.9; 95%CI, 0.7 to 1.4 Stoppers: RR, 1.3; 95%CI, 0.9 to 1.6 | | |
| | >Specialist visits, 1 Continuous: RR,1.3; 95%Cl, 1.1 to 1.5 Irregular: RR, 1.2; 95%Cl, 1.0 to 1.3 Stoppers: RR, 0.9; 95%Cl, 0.8 to 1.1 | | |
| | >Specialist visits, ≥2 Continuous: RR, 2.4; 95%Cl, 1.7 to 3.3 Irregular: RR, 0.8; 95%Cl, 0.6 to 1.2 Stoppers: RR, 1.1; 95%Cl, 0.8 to 1.4 | | |
| | >Specialist procedures, 1 Continuous: RR, 1.5; 95%Cl, 1.2 to 1.8 Irregular: RR, 1.1; 95%Cl, 1.0 to 1.3 Stoppers: RR, 0.9; 95%Cl, 0.8 to 1.1 | | |
| | >Specialist procedures, ≥2 Continuous: RR, 1.7; 95%Cl, 1.1 to 2.6 Irregular: RR, 1.2; 95%Cl, 0.9 to 1.6 Stoppers: RR, 0.8; 95%Cl, 0.5 to 1.1 | | |
| | >Diagnostic tests, 1 Continuous: RR, 1.1; 95%CI, 0.8 to 1.6 Irregular: RR, 1.1; 95%CI, 0.9 to 1.3 Stoppers: RR, 1.1; 95%CI, 0.9 to 1.3 | | |

| Author, year Country Study Design/Data | | | |
|---|--|--|----------------------|
| source | | | |
| Risk of Bias Ververs, 2009 ⁷⁶ | 7. Fetus/infant/child outcomes up to 12 months of age >Diagnostic tests, ≥2 | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| (CONT) | Continuous: RR, 1.9; 95%Cl, 1.4 to 2.5 Irregular: RR, 1.5; 95%Cl, 1.2 to 1.9 Stoppers: RR, 0.9; 95%Cl, 0.7 to 1.1 | | |
| | >Hospital admissions, 1 Continuous: RR,1.5; 95%CI,1.3 to 1.8 Irregular: RR, 1.2; 95%CI, 1.0 to 1.3 Stoppers: RR,1; 95%CI, 0.9 to 1.1 | | |
| | >Hospital admissions, ≥2 Continuous: RR,2.4; 95%CI, 1.8 to 3.1 Irregular: RR,1.4; 95%CI, 1.1 to 1.8 Stoppers: RR,0.8; 95%CI, 0.6 to 0.9 | | |
| | Drug prescriptions, ≥1 Continuous: RR, 0.5; 95%CI, 0.3 to 0.8 Irregular: RR, 0.9; 95%CI, 0.8 to 1.1 Stoppers: RR, 1; 95%CI, 0.9 to 1.2 | | |
| | First year of Life GP visits, 1 Continuous: RR, 1.0; 95%CI, 0.8 to 1.4 Irregular: RR, 1.0; 95%CI, 0.9 to 1.2 Stopper: RR, 1.1; 95%CI, 0.9 to 1.2 | | |
| | GP visits, ≥2 Continuous: RR, 1.5; 95%Cl, 1.3 to 1.8 Irregular: RR, 1.2; 95%Cl, 1.1 to 1.4 Stopper: RR, 1.3; 95%Cl, 1.2 to 1.5 | | |

| Author, year | | | |
|-----------------------------|---|--|--|
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Ververs, 2009 ⁷⁶ | Specialist visits, 1 | 6. Clind outcomes after 12 months of age | 5. Maternal Outcomes |
| | | | |
| (CONT) | Continuous: RR, 1.4; 95% CI, 1.1 to 1.8 | | |
| | Irregular: RR, 1.1; 95%CI, 0.9 to 1.3 | | |
| | Stopper: RR, 1.0; 95%CI, 0.9 to 1.2 | | |
| | | | |
| | Specialist visits, ≥2 | | |
| | Continuous: RR, 1.5; 95%CI, 1.2 to 1.9 | | |
| | Irregular: RR, 1.4; 95%CI, 1.2 to 1.6 | | |
| | Stopper: RR, 1.2; 95%CI, 1.1 to 1.4 | | |
| | | | |
| | Specialist procedures, 1 | | |
| | Continuous: RR, 1.6; 95%CI, 1.3 to 2.0 | | |
| | Irregular: RR, 1.1; 95%CI, 0.9 to 1.2 | | |
| | Stopper: RR, 1.1; 95%CI, 0.9 to 1.3 | | |
| | | | |
| | Specialist procedures, ≥2 | | |
| | Continuous: RR, 1.3; 95%CI, 0.9 to 1.7 | | |
| | Irregular: RR, 1.3; 95%Cl, 1.1 to 1.5 | | |
| | Stopper: RR, 1.1; 95%CI, 0.9 to 1.3 | | |
| | , | | |
| | Diagnostic tests, 1 to 2 | | |
| | Continuous: RR, 1.2; 95% CI, 0.9 to 1.6 | | |
| | Irregular: RR, 1.2; 95%CI, 0.9 to 1.4 | | |
| | Stopper: RR, 1.2; 95%CI, 0.9 to 1.4 | | |
| | | | |
| | Diagnostic tests, ≥3 | | |
| | Continuous: RR, 1.2; 95%CI, 0.8 to 1.6 | | |
| | Irregular: RR, 1.1; 95%CI, 0.9 to 1.4 | | |
| | Stopper: RR, 1.1; 95%CI, 0.9 to 1.3 | | |
| | | | |
| | Hospital admissions, 1 | | |
| | Continuous: RR, 2.2; 95%CI, 1.5 to 3.1 | | |
| | Irregular: RR, 1.1; 95%CI, 0.8 to 1.5 | | |
| Wen 2006 ⁷⁷ | SSRI exposed vs unexposed | NR | Preeclampsia: 1.20 (0.90 to 1.61) |
| Canada | Adjusted difference (95% CI) | INIX | Urinary infection: 1.53 (0.76 to 3.09) |
| RC, PBD | Birth weight<2500g 1.58 (1.19 to 2.11) | | Gestational diabetes mellitus: 1.31 (0.86 to |
| Medium | Gestational age<37 wk: 1.57 (1.28 to 1.92) | | 2.01) |
| MEGIUIII | Major structural anomalies: 0.98 (0.59 to 1.64) | | Placental previa: 1.20 (0.55 to 2.60) |
| | | | |
| | Minor structural anomalies: 1.02 (0.69 to 1.51) | | Placental abruption: 1.56 (0.99 to 2.46) |
| | Fetal death: 2.23 (1.01 to 4.93) | | |
| | Infant death: 1.96 (0.97 to 3.94) | | |
| | Sepsis: 1.41 (0.65 to 3.06) | | |
| | Seizures: 3.87 (1.00 to 14.99) | | |
| | Mechanical ventilation: 1.14 (0.74 to 1.75) | | |

| Author, year Country Study Design/Data source Risk of Bias Wilson, 2011 ⁷⁸ US | 7. Fetus/infant/child outcomes up to 12 months of age PPHN, Adjusted OR (95% CI) Use of SSRI after 20 weeks: 0 (0, 3.0) | 8. Child outcomes after 12 months of age NR | 9. Maternal Outcomes NR |
|---|--|---|--|
| Medium Wisner, 2009 ⁷⁹ US, Ohio Prospective cohort Medium | Minor physical anomalies Data available for 203 (85%) of infants. Neither first-trimester nor continuous exposure to SSRIs or depression was associated with a significant increase in the number of minor anomalies or the proportion of infants with three or more anomalies. No major malformations were observed. Infant birth weight Adjusted P = 012 across groups, Proportion < 10th or above 90th percentile, head circumference or length = NSD (P not given) Mean Weight (18), Kg sd No SSRI, no depression (N = 130) 3.53, 0.5 Continuous SSRI exposure (N = 47) 3.36, 0.7 Continuous depression, no SSRI (N = 14) 3.22, 0.6 Partial SSRI exposure (N = 22) 3.39, 0.4 Partial depression, no SSRI (N = 22) 3.37, 0.6 Gestational Age: p=0.08 across groups Preterm Birth; p=0.009. across groups Adjusted Rate Ratios Continuous SSRI exposure (N=48) 5.43 1.98–14.84 Continuous depression, no SSRI (N=14) 3.71 0.98–14.13 Partial SSRI exposure (N=23) 0.86 0.11–6.92 Partial depression, no SSRI (N=22) 1.04 0.22–5.01 NICU admissions p=0.88 across groups Score > 2 on Infant Subscale of Peripartum Events Scale: p=0.39 across groups; Post hoc Fisher's exact test indicated that the group with continuous SSRI exposure did not differ from each other and that both differed from the group with neither exposure. | NR | Weight gain: Adjusted P = 0.41 across groups Mean Weight gain (N), pounds, sd No SSRI, no depression (N = 82) 31.6, 13.0 Continuous SSRI exposure (N = 23) 28.6, 13.8 Continuous depression, no SSRI (N = 3) mean 17.7lbs, SD 15.5 Partial SSRI exposure (N = 16) 31.4, 12.0 Partial depression, no SSRI (N = 18) mean 24.8, SD 16.2 |

| Author, year | | | |
|----------------------------|---|--|----------------------|
| Country | | | |
| Study | | | |
| Design/Data | | | |
| source | | | |
| Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
| Wogelius, 200680 | Congenital malformations, Adjusted OR (95% CI) | NR | NR |
| Denmark | Women who redeemed a prescription for an SSRI during 2nd and | | |
| PBR | 3rd trimester | | |
| Medium | All births: 1.34 (1.00, 1.79) | | |
| | >=37 weeks gestation: 1.23 (0.88, 1.72) | | |
| | <37 weeks gestation: 1.63 (0.85, 3.15) | | |
| | (* * * * * * * * * * * * * * * * * * * | | |
| | Women who redeemed a prescription for an SSRI during 1st | | |
| | trimester or 30 days before | | |
| | All births: 1.84 (1.25, 2.71) | | |
| | >=37 weeks gestation: 1.75 (1.14, 2.70) | | |
| | <37 weeks gestation: 1.77 (0.73, 4.32) | | |
| Yonkers 2012 ⁸¹ | Risk of preterm birth: (term vs. preterm) | NR | NR |
| US | Additionally Adjusted OR and 95% CI | | |
| Prospective | Major depressive episode, exposed | | |
| Cohort [PC] | 1.51 (0.60-3.8) | | |
| outline) | Major depressive episode, unexposed | | |
| Low | .86 (0.44-1.7) | | |
| 2011 | No major depressive episode, exposed | | |
| | 1.50 (0.94-2.4) | | |
| | No major depressive episode, unexposed | | |
| | reference category | | |
| | | | |
| | Risk of early and late preterm birth: (term vs. preterm) Adjusted | | |
| | OR and 95% CI | | |
| | Early preterm birth N=59 | | |
| | Major depressive episode, exposed | | |
| | NA | | |
| | Major depressive episode, unexposed | | |
| | 0.86 (0.29-2.6) | | |
| | No major depressive episode, exposed | | |
| | 0.93 (0.35-2.4) | | |
| | No major depressive episode, unexposed | | |
| | reference category | | |
| | Late preterm birth N=166 | | |
| | Major depressive episode, exposed | | |
| | 3.14 (1.5-6.8) | | |
| | Major depressive episode, unexposed | | |
| | 1.34 (0.71-2.5) | | |
| | No major depressive episode, exposed | | |
| | 1.93 (1.2-3.2) | | |
| | No major depressive episode, unexposed | | |
| | reference category | | |
| l | 1 | 1 | 1 |

| Author, year Country Study Design/Data source Risk of Bias | 7. Fetus/infant/child outcomes up to 12 months of age | 8. Child outcomes after 12 months of age | 9. Maternal Outcomes |
|--|---|--|----------------------|
| Zeskind 2004 ^{§2} US Prospective cohort study/Data Source [PC, AD] Medium | Gestational age, wk 38.66 (0.35) vs. 39.65 (0.20) P=.019 Birth weight, g 3453.53 (98.87) vs. 3297.35 (88.79) P=.25 Length, cm 51.06 (0.65) vs. 50.81 (0.43) P=.75 Head circumference, cm 33.87 (0.40) vs. 33.53 (0.40) P=.55 Neurobehavioral Outcomes: Adjusted Mean (SE) Tremulousness 2.32 (0.20) vs. 1.80 (0.20) P=0.038 Behavioral states: Number different: 2.53 (0.32) vs. 3.71 (0.32) P=0.009 Number of changes:7.15 (2.34) vs. 16.56 (2.34) P=0.005 Active sleep Number of epochs: 94.66 (6.64) vs. 83.46 (6.64) P=0.13 Number of bouts: 3.36 (0.44) vs. 6.58 (0.44) P=0.001 Longest bout: 68.20 (6.37) vs. 49.80 (6.37) P=0.03 Number of startles: 14.59 (2.70) vs. 9.85 (2.59) P=0.13 Motor activity: 152.05 (21.25) vs. 106.51 (21.96) P=0.08 Number of HRV rhythms: 1.98 (0.19) vs. 2.39 (0.19) P=0.07 | NR | NR |

Note: AD=administrative database, AOR=adjusted odds ratio, ADHD=attention deficit hyperactivity disorder, ASD=atrial septal defects, BMI=body mass index, BRS=Behavioral Rating Scale, CC=case control, CES-D= Center for Epidemiologic Studies Depression Scale, CGI-I=Clinical Global Impression scale - Improvement, CGI-S=Clinical Global Impression Scale - Severity, CI=confidence interval, CNS=central nervous system, CV=cardiovascular, DSM-IV=Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, ECG=electrocardiogram, ETOH=alcohol, FDA=US Food and Drug Administration, GA=gestational age, GI=gastrointestinal, GP=general practitioner, HAM-A=Hamilton Anxiety Rating Scale, HAM-D=Hamilton Depression Rating Scale, IQ=intelligence quotient, IQR=Interquartile range, ITT=intention to treat, LD=linked database, LMP=last menstrual period, MADRS=Montgomery-Asberg Depression Rating Scale, MDD=major depressive disorder, mDDD=multiple defined daily dose, MDI=Mental Development Index, MR=mental retardation, MRI=magnetic resonance imaging, NA=not applicable, NBDPS=National Birth Defects Prevention Study, NICU=neonatal intensive care unit, NR=not reported, NSAID=non steroidal anti inflammatory drug, NSD=no significant difference, OCD=obsessive compulsive disorder, OR=odds ratio, PBD=population-based database, PBR=population-based registry, PC=prospective cohort, PDD=pervasive developmental disorder, PDI=Psychomotor Development Index, PPHN=persistent pulmonary hypertension, PTSD=post-traumatic stress disorder, RR=relative risk, RRR=relative risk reduction, SCN=special care nursery, SD=standard deviation, SEIFA= Socio-Economic Indexes for Areas, SES=socio-economic status, SNRI=serotonin norepinephrine reuptake inhibitor, SRI=serotonin reuptake inhibitor, SRI=selective serotonin reuptake inhibitor, TUS=Teratogen Information Service, UK=United Kingdom, US=United States, VSD=ventricular septal defects.

Evidence Table 2. Risk of Bias Assessment Observational Studies

| Author Year Country | 1. Unbiased patient selection? | 2. Adequate exposure ascertainment? | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? | 5. Events adequately specified and defined? |
|--|---|--|----------------------------------|--|---|
| Alwan 2007 ¹ US | Unclear; although patients with pregestational diabetes were not pre-specified to be excluded, they were ultimately excluded from the analyses (2.2% cases and 0.5 controls, <i>P</i> <0.001) | No, self-report 6 weeks to 2 years after delivery, without validation and no ultrasound to confirm gestational age | Yes | Yes, Yes | Yes |
| Alwan 2010 ² US | Unclear; consent rates NR; also, although patients with pre-gestational diabetes were not pre-specified to be excluded, they were ultimately excluded from the analyses (2.7% cases and 0.6% controls; P<0.001) | No, self-report 6 weeks to 2 years after delivery, without validation and method for confirming gestational age is NR | Yes | Yes, Yes | Yes |
| Andrade 2009 ⁸⁶ | Yes | Unclear; pharmacy database; length of gestation not available, trimester of exposure based on estimates of gestational age | Yes | Yes | Yes |
| Bakker 2010 The Netherlands | Unclear; consent rates NR for controls | Unclear; prescription database verified by telephone interview with mother; but methods for confirming gestational age NR | Yes | Unclear, completeness of data NR for controls | Yes |
| Bakker 2010 ^{4, 5} The Netherlands | Unclear; overall consent rate of 80%, but between-groups comparability NR | Unclear; prescription database verified by telephone interview with mother; but methods for confirming gestational age NR | Yes | Yes, Yes | Yes |
| Ban 2012 ⁶ | Yes | Unclear | Yes | Yes | Yes |
| Berard 2007 ⁷ | Yes | Unclear; prescription database, no assessment of compliance; gestational age estimated by LMP | Yes | Unclear; completeness of data NR for controls | Yes |
| Berle 2004 ⁸⁷ | Unclear, process for selecting control group NR | Yes, serum concentrations | Unclear, not specified | Unclear, NR | Yes |
| Bogen 2010 ⁸ (companion to Wisner 2009) | Yes | Yes | Yes | No overall=39% Yes differential | Yes |

| Author Year Country | 1. Unbiased patient selection? | 2. Adequate exposure ascertainment? | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? | 5. Events adequately specified and defined? |
|--|--|---|----------------------------------|--|---|
| Boucher 2008 ⁹ | Unclear; comparison group from same population-base, but high potential for confounding by indication as comparison is AD exposed or not and depression diagnosis data NR | Unclear; data source is pharmacy database and no methods to overcome uncertainties, few exposure details reported, more concerning in context of narrow exposure window | Unclear, not specified | Yes | Yes |
| Bracken 1981 ⁸⁸ | Yes | No; self-report without validation (only contacted prescriber in 10% of instances when further info was required) | Yes | Yes overall=13% No for differential: 24% vs 5.5% | No |
| Casper 2003 ¹⁰ | Unclear; time frame, number screened, consent rates NR | Unclear; self-report with no validation, but some prospective data and dosages reported | Yes | Unclear; participation rate NR | Yes |
| Chambers 1996 ¹¹ US | Unclear | Unclear (self report, MR corroboration not mentioned) | Yes | Yes | Yes |
| Chambers 2006 ¹² | Yes | Unclear; self-report based on structured telephone interview, no validation reported | Yes | Yes | Yes |
| Chan-Fai- Chan 2005 ⁸⁹ Canada | No - 1) could be a referral bias of some kind causing women to be recommended bupropion may differ by country or database 2) Comparison group was composed from only one of the three data sources | No - self report of exposure by patient with no confirmation | Yes | Unclear | Yes |

| Author Year Country | 1. Unbiased patient selection? | 2. Adequate exposure ascertainment? | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? | 5. Events adequately specified and defined? |
|---|---|---|--|---|---|
| Cole 2007 ¹³ | Yes | Unclear; prescription database, gestational age estimated by earliest/latest conception | Yes | Unclear; completeness of data not clearly reported, but in Discussion indicates that greater frequency of charts that could not be abstracted in the 'other antidepressant' group | Yes |
| Cole 2007 ¹⁴ US | Yes | Unclear - drug dispensing data only | Yes | Yes | Yes |
| Colvin 2010 ⁹⁰ Australia | Yes | Unclear; first trimester exposure based on LMP | Yes (up to 6 years with definition in citation) | Unclear; missing data for 'general patient' category for 23 medicines with incomplete ascertainment | Yes |
| Colvin 2011 ⁹¹ Australia | Unclear - only 80% of the claims data is captured by the PBS database | Unclear - only have drug dispensing data | Yes | Yes | Yes |
| Colvin 2012 ¹⁵ Australia | Unclear - only 80% of the claims data is captured by the PBS database | Unclear - only have drug dispensing data | Yes | Yes | Yes |
| Costei 2002 ⁹² Canada | Unclear; reasons for exclusions NR | No; no verification and no ultrasound. | Yes (presumed though not stated when followup interview performed) | Unclear; completeness of data NR | No (not defined, parental report) |

| Author Year Country Croen 2011 ¹⁶ | 1. Unbiased patient selection? Yes | 2. Adequate exposure ascertainment? Yes | 3. Reasonable followup duration? Unclear; only 18% of autism | 4. Acceptable levels of differential or overall high loss to followup? Unclear; reasons for | 5. Events adequately specified and defined? Yes |
|---|---|--|--|---|--|
| | | | dx before age 3 this applies to both cases and controls | exclusion of 122 of original 420 cases NR | |
| Davidson 2009 ¹⁷ Israel | Unclear (not stated) | Unclear (self-report only? "during entire pregnancy") | Yes | Yes | Yes |
| Davis 2007 ¹⁸ | Yes | Unclear; pharmacy database; length of gestation not available, trimester of exposure based on estimates of gestational age | Yes | Overall: 30 days=yes (11%), 365 days=no (42%) Differential: 30 days=unclear, 365 days=yes | Unclear; identified use of ICD-9 codes, but did not pre specify which ones |
| De Vera 2012 ⁹³ Canada | Yes | Yes | Yes | Unclear; completeness of data NR | Yes |
| Diav-Citrin 2008 ⁹⁴ | Unclear | Unclear | Yes | Unclear | Yes |
| Djulus 2006 ⁹⁵ | Unclear | Unclear | Yes | Unclear | Yes |
| Dubnov-Raz 2012 ²⁰ Israel | Unclear (not stated) | Unclear (self-report, "any stage") | Yes | Yes | Yes |
| Dubnov-Raz, 2012 ¹⁹ Israel | Unclear (control group selected because of murmur and normal echo) Unclear if exposed group identified by self-report | Unclear (method/dose/duration not stated presumed self-report at onset of labor) | Yes | Yes | Yes |
| Einarson 2009 ⁹⁶ | Unclear | Unclear | Yes | Unclear | Yes |
| Einarson 2011 ⁹⁷ Canada | Unclear how group of 1245 exposed women was formed | No (self report) | Yes | Unclear, completeness of data NR | No; definitions NR |

| Author Year Country | 1. Unbiased patient selection? | 2. Adequate exposure ascertainment? | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? | 5. Events adequately specified and defined? |
|---|--|---|---|--|--|
| Einarson, 2003 ⁹⁸ Canada | Unclear (only reported number followed) | Unclear (self-report only) | Yes | Unclear (not stated) | Yes |
| Einarson, 2009 ⁹⁹ Canada | Unclear (not stated) | No; no verification and no ultrasound. | Unclear (timing of followup interview unknown) | Unclear; completeness of data NR | No (no method of assigning malformations reported) |
| Einarson, 2010 ¹⁰⁰ Canada | Unclear (report number followed only) | Unclear (self-report only) | Yes | Unclear (not stated) | Yes |
| El Marroun 2012 ²¹ The Netherlands | Yes | Yes | Yes | Yes | Yes |
| Ericson 1999 ¹⁰¹ | Unclear; population cohort but selection based on drug exposure only | Unclear - not described | Yes | unclear | Yes |
| Ferreira 2007 ²² | Unclear; population cohort but selection based on drug exposure only | Unclear - not described | Yes | Yes | No |
| Figueroa 2010 ²³ US | Yes (data set) | No (prescriptions) prescription database without compliance data and gestation estimated by sub tracing 93 days at a time from deliver date | Yes | Unclear | Yes |
| Gabally 2009 ¹⁰² | Unclear; very little description | No, appears to be self report without validation | Yes | Yes | Yes |
| Galbally 2011 ¹⁰³ (companion to Galbally 2009) | Unclear; very little description | No, appears to be self report without validation | Yes | No - 25% overall, 30% in unexposed group and 18.5% in exposed group. | Yes - maternal depression and child development scales |
| Gorman 2012 ²⁴ US | Unclear; 2320 possible; 284 included - not clear how selected. Selection of control group unclear. | No - self report. | Yes | Yes | Yes |
| Grzeskowiak 2012 ²⁵ Australia | Unclear; population cohort but selection based on drug exposure only | Yes | Yes | Unclear | Yes |

| Author Year Country Hale 2010 ¹⁰⁴ US | 1. Unbiased patient selection? Unclear (who, when, why?) | Adequate exposure ascertainment? Unclear (self-report via survey) | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? Unclear; completeness of data NR | 5. Events adequately specified and defined? No (subjective, e.g. "low body temp") |
|---|---|--|--|---|---|
| Heikkinen 2002 ²⁶ Finland | Unclear (not stated how 11/10 chosen) | Unclear (self report?) | Yes | Yes | Unclear |
| Jimenez- Solem 2012 ²⁷ Denmark | Yes | Unclear - drug dispensing data only | Yes | Yes | Yes |
| Jimenez- Solem, 2013, Denmark ²⁸ | Yes | Yes | Yes | Yes | Yes |
| Jordan 2008 ²⁹ | Yes | Yes | Yes | Yes | Yes |
| Kallen 2004 ³⁰ | Yes | Unclear; 39% timing not stated | Yes | Yes - see ref number14 for supplemental information | Yes |
| Kallen 2007 ¹⁰⁵ | Unclear; population cohort but selection based on drug exposure only | Unclear - exposure primarily self-report. | Yes | Unclear | Yes |
| Kallen 2007 ³¹ Sweden | Unclear - we don't know if they were depressed or not | No - self-report | Yes | Yes | Yes |
| Kieler 2012 ³³ Sweden | Yes | Yes | Yes | Unclear | Yes |
| Kleiger- Grossmann 2011 ¹⁰⁶ Canada | Unclear - could be a referral bias of some kind causing women to be recommended escitalopram, may differ by country or database | No - self report of exposure by patient with no confirmation | Unclear - it is unclear if all major malformations (particularly cardiac) would have been detected at the time of followup | No - loss to followup is not reported | Yes |

| Author Year Country Klinger | 1. Unbiased patient selection? Yes | Adequate exposure ascertainment? Unclear, self-report without verification | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? No (12% with | 5. Events adequately specified and defined? Yes |
|--|---|--|----------------------------------|--|---|
| 2010 ¹⁰⁷ Israel | | | | NAS, 55% without) | |
| Kornum 2010 ³⁴ Denmark | Unclear - we don't know if they were depressed or not | Yes | Yes | Yes | Yes |
| Kulin 1998 ¹⁰⁸ | Unclear; recruitment time frame not reported, number excluded not reported. | No; self-report without validation, very little detail provided about dose, duration, etc. | Yes | No | No |
| Laine 2003 ³⁵ | Unclear | Unclear - exposed mothers blood was analyzed for drug, but unexposed was not. No other verification methods. | Yes | Yes | Yes |
| Latendresse, 2011 ³⁶ US | Yes | Yes | Unclear | No. 20% excluded after initial enrollment | Yes |
| Lennestal 2007 ³⁷ Sweden | Yes - birth registries | No | Yes (delivery outcomes) | Unclear, completeness of data NR | Yes |
| Levinson- Castiel 2006 ³⁸ Israel | Yes | No, self report with no verification | Yes | Yes | Yes |
| Lewis 2010 ³⁹ Australia | Yes | No - self report only | Yes | Yes | Yes |
| Logsdon 2011 ⁴⁰ US | Yes | Unclear - drug levels taken only on those thought to be taking SSRs - not everyone. | Yes | Unclear - not reported and it looks like it could be as high as about 30% | Yes |
| Louik 2007 ⁴¹ US | Unclear - about 40% of the eligible people refused to participate | No - self-report | Unclear | Yes | Yes |
| Lund 2009 ⁴² Denmark | Yes | Unclear because self-report and no verification | Yes | Unclear | Yes |
| Malm 2011 ⁴³ Finland | Yes | Yes | Yes | Yes | Yes |

| Author Year Country | 1. Unbiased patient selection? | 2. Adequate exposure ascertainment? | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? | 5. Events adequately specified and defined? |
|--|---|---|----------------------------------|--|---|
| Manakova 2011 ¹⁰⁹ Czech Republic | No. Only describes number followed but not the number eligible for the study. | Unclear | Unclear | Unclear. | No. |
| Maschi 2008 ¹¹⁰ Italy | Yes | No, self report and no validation and unclear about confirmation of gestational age | Yes | Unclear | No. |
| McElhatton 1996 ¹¹¹ UK | Unclear - unclear that they were including everyone who called. | No - self-report | Yes | No - 16-20% loss to followup | Yes |
| McFarland 2011 ⁴⁴ US | Yes | No - self-report | Yes | No | Yes |
| Merlob 2009 ⁴⁵ Israel | Yes | No - self-report | Yes | Yes | Yes |
| Misri 1991 ¹¹² Canada | Unclear; eligibility criteria described, but numbers and reasons for exclusions NR | Unclear, medications managed prospectively, but compliance NR | Yes | Unclear, NR | No |
| Misri 2006 ⁴⁶ Canada | Unclear: eligibility criteria NR | Unclear, NR | Yes | No (58% attrition in exposed group, 39% in control group) | Yes |
| Misri 2010 ⁴⁷ Canada | Unclear; eligibility criteria described, but numbers and reasons for exclusions NR | Unclear; methods NR | Yes | Yes overall, 19% loss to followup Unclear differential | Yes |
| Mulder 2011 ⁴⁸ The Netherlands | Unclear; participation required patient be identified by doctor or midwife and comparability of between-groups consent rates NR | Unclear; self-report | Yes | No; overall high and study group higher than comparison group | Yes |
| Nakhai-Pour 2010 ⁴⁹ Canada | Yes | Yes | Yes | Yes | Yes |

| Author Year Country Nijenhuis | 1. Unbiased patient selection? Yes Data Base | Adequate exposure ascertainment? Unclear; date of conception guessed. Exposure | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? | 5. Events adequately specified and defined? |
|---|--|--|----------------------------------|--|---|
| 2012 ¹¹³ The Netherlands | | "calculated", unclear compliance. Used admin data base | | | |
| Nordeng 2012 ⁵⁰ Norway | Yes | Unclear | Yes | Yes | Yes |
| Nulman 1997 ¹¹⁴ Canada | Unclear; exclusions reported, similar consent rates, but inclusion based on self-report and recruitment time frame end date NR | No; self-report without validation, very few exposure details reported | Yes | Yes | No for birth defects and perinatal complications, yes for neurobehavioral |
| Nulman 2002 ⁸³ | Unclear; recruitment time frame end date NR, only reported number followed up | No; self-report without validation, very little detail provided about dose, duration, etc. | Yes | Yes for Reynell, no for Baley (35% missing overall: 18% for fluoxetine group, 39% for TCA group and 505 for comparisons group); no for McCarthy (60% excluded from analysis overall; unclear about differential) | Yes |
| Nulman 2012 ⁵¹ Canada | Unclear; although they demonstrated between-group balance in exclusions due to "unable to be located or refused participation", they didn't itemize which groups the 381 who did not meet the inclusion criteria came from | Unclear; self-report | Yes | Yes overall; LTFU higher in TCA group (19% vs 7%) | Yes |

| Author Year Country Oberlander 2002 ⁵² (2- day), Oberlander 2005 ¹¹⁵ (2- month) | 1. Unbiased patient selection? Unclear; "consecutive" recruitment, but criteria NR; 63% participation rate overall and between-group comparability in participation rate NR; notes this is part of a larger study, but no citation | 2. Adequate exposure ascertainment? Yes | 3. Reasonable followup duration? Yes | 4. Acceptable levels of differential or overall high loss to followup? Yes overall, no differential at 2 days (med=27% vs 12%=controls) and 2 months (17% vs 4%) | 5. Events adequately specified and defined? Yes |
|---|---|---|--------------------------------------|---|---|
| Oberlander 2004 ¹¹⁶ Canada | Unclear; exposed cohorts enrolled consecutively, but unclear about controls | Yes, plasma levels | Yes | Yes | Yes |
| Oberlander 2006 ⁵³ | Yes | Unclear; no details about exposure | Yes | Yes | Yes |
| Oberlander 2007 ¹¹⁷ (4- year followup to Oberlander 2005) | Unclear (see Oberlander 2002) | Yes (see Oberlander 2002) | Yes | No for differential (SSRI=52%, control=39%); no for overall=48% | Yes |
| Oberlander 2008 ⁵⁴ | Unclear; inclusion criteria NR | Yes | Yes | Yes overall (14%); unclear for differential | Yes |
| Oberlander 2008 ⁵⁵ Canada | Yes | Unclear - drug dispensing data only | Yes | Yes | Yes |
| Oberlander 2010 ¹¹⁸ | Unclear, eligibility criteria NR, described as a convenience sample, no time frame | Unclear, methods NR, but doses reported | Yes | Yes overall (23% after 3 years); between- groups NR | Yes |
| Okun 2011 ⁵⁶ US | Yes | Yes | Yes | Yes at week 20, no at weeks 30 (27%) and 36 (36%) | Yes |
| Okun 2012 ⁵⁷ US | Yes | Unclear | Yes | Yes | Yes |

| Author Year Country Palmsten 2012 ⁵⁸ Canada | 1. Unbiased patient selection? Yes | Adequate exposure ascertainment? Unclear; gestational age estimated as 280 days prior to estimated delivery date | 3. Reasonable followup duration? | 4. Acceptable levels of differential or overall high loss to followup? Unclear; completeness of data NR | 5. Events adequately specified and defined? Yes |
|---|--|---|----------------------------------|--|--|
| Pastuszak 1993 ¹¹⁹ | Unclear; recruitment time frame NR, only reported number followed up | No; self-report without validation, very few exposure details reported | Yes | Unclear; participation rate NR | No for birth defects, yes for pregnancy outcomes |
| Pawluski 2009 ¹²⁰ Canada | Unclear; insufficient information | Yes, serum concentrations | Yes | No. 30% missing data (14% in SSRI group vs 50% in non-SSRI group); but no differences between those with and without data | No for neonatal outcomes, yes for neonatal adaptation symptoms and maternal mood |
| Pearlstein 2006 ¹²¹ US | Yes | Yes | Unclear; 12 weeks | Overall: No, Differential: No | Unclear |
| Pearson 2007 ⁵⁹ US | Unclear; only reported number enrolled | Unclear; methods NR | Yes | Yes, no LTFU, | Yes |
| Pedersen 2009 ⁶⁰ Denmark | Yes | Unclear because database with no compliance data | Yes | Yes: overall, differential: unclear | Yes |
| Pedersen 2010 ⁶¹ Denmark | Unclear; comparability of between-groups consent rates NR | Unclear; self-report, no verification | Yes | No for overall: 76% to 79% at 6m and 54% to 62% at 19 months; Yes for differential | Yes |
| Rai 2013 ⁶² Sweden | Yes | Unclear - relies on self-report | Yes | Yes | Yes |

| Author Year Country Ramos 2008 ⁸⁴ Canada | 1. Unbiased patient selection? Yes | Adequate exposure ascertainment? Unclear; pharmacy data; gestational estimated by LMP date, but confirmed between two databases | 3. Reasonable followup duration? Yes | 4. Acceptable levels of differential or overall high loss to followup? Yes for differential; unclear for overall because nonresponders were less likely to be welfare recipients than responders | 5. Events adequately specified and defined? Yes |
|--|---|--|---|---|---|
| Ramos 2010 ⁶⁴ Canada | Yes | Unclear; pharmacy data; gestational estimated by LMP date, but confirmed between two databases | Yes | Yes | Yes |
| Rampono 2004 ¹²² Australia | Unclear; only reported number enrolled | No; timing is an issue they were taking in 3rd trimester but could have been taking entire pregnancy | Yes | Yes | Yes |
| Rampono 2009 ⁶⁵ Australia | Unclear; only reported number enrolled | Yes; serum concentrations | Yes | No for overall (25%); unclear for differential | Yes |
| Reebye 2002 ⁶⁶ British Columbia | Unclear; exposed groups recruited during pregnancy and controls after delivery; unclear how decided who to approach | Unclear; not described, but prospective and dosages reported | Yes | No overall (24%); no differential (17% vs 33%) | Yes |
| Reis 2010 ⁶⁷ Sweden | Yes | Unclear | Yes | Yes | Yes |
| Salisbury 2011 ⁶⁸ US | Yes, eligibility criteria described and flow of patient selection described | Yes (TLFB Interview) | Yes - Delivery outcomes, NB assessments | Ratings are No for overall and unclear for differential | Yes |
| Salkeld 2008 ⁶⁹ Canada | Yes | Yes | Yes | Yes | Yes |
| Simon 2002 ⁷⁰ US | Yes | Yes | Yes | Yes | Yes |

| Author Year Country Sit 2011 ⁷¹ US | 1. Unbiased patient selection? Yes | 2. Adequate exposure ascertainment? Yes | 3. Reasonable followup duration? Yes | 4. Acceptable levels of differential or overall high loss to followup? No overall (only included 21 of original 48 from 'continuous SSRI exposure group, 44%); unclear differential | 5. Events adequately specified and defined? Yes |
|---|---|---|--------------------------------------|--|---|
| Sivojelezova 2005 ¹²³ | Unclear | Unclear | Yes | Unclear | Yes |
| Stephansson 2013 ⁷² Sweden | Yes | Unclear | Yes | Yes | Yes |
| Suri 2004 ¹²⁴ | Unclear | Unclear | Yes | Yes | Yes |
| Suri 2007 ⁷³ US | Unclear; numbers and reasons for exclusions NR | Yes | Yes | No overall, 36% excluded from analysis; unclear about differential, NR | Yes |
| Suri 2011 ⁷⁴ US | Unclear; Higher participation rate in controls (79%) vs Group 1 (67%) | Yes | Yes | Yes | Yes |
| Toh 2009 ¹²⁵ US/Canada | No (live-born, malformed excluded; since primary outcome GA, pre-term and weight, this may influence) | No (self report, some attempt to verify with bottle, unclear what percent had GA by ultrasound) | Yes | Yes (95% overall, losses not described) | Yes |
| Toh 2009 ⁷⁵ US/Canada | Yes | No (self report, some attempt to clarify with bottle, LMP and ultrasound as self-report) | Yes | Yes | No (high blood pressure not defined) |
| Ververs 2009 ⁷⁶ The Netherlands | Yes | Unclear (pharmacy dispensing of "at least one" Rx) | Yes | Yes | Yes |
| Wen 2006 ⁷⁷ Canada | Yes | Yes | Yes | Unclear, completeness of data NR | Yes |

| Author Year Country Wichman 2009 ¹²⁶ | Unbiased patient selection? Unclear (no info on diagnosis/severity) | 2. Adequate exposure ascertainment? Yes | 3. Reasonable followup duration? Unclear (similar | 4. Acceptable levels of differential or overall high loss to followup? | 5. Events adequately specified and defined? |
|--|--|--|---|---|---|
| US | Library (substant dispusion stiffed in EMD | No. | between groups, but just followed until discharge from birth hospitalization) | No. | N |
| Wilson 2011 ⁷⁸ US | Unclear (not stated how identified in EMR, controls matched for GA only) | Yes | Yes | Yes | Yes |
| Wisner 2009 ⁷⁹ /Okun 2012 ⁵⁷ US | Yes | Yes, maternal serum levels | Yes | No overall, 27% missing data (54% delivery data, 46% missing congenital anomaly assessments); unclear differential as between- groups missing data NR | Yes |
| Wogelius 2006 ⁸⁰ Danish | Yes | Yes | Yes | Yes | Unclear (ICD-9 codes without verification) |
| Yonkers 2012 ⁸¹ US | Yes | Unclear (self-report) | Yes | Yes | Yes |
| Zeskind 2004 ⁸² US | Unclear (how cases and controls were chosen) | Yes | Yes | Yes | Unclear (exact age at which behavioral state monitored not given, just range of all; this is important as infants have very distinct behavior in first hours of life) |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating |
|--|--|---|---|--------------------------------|
| Alwan 2007 ¹ US | Yes | Yes | Yes | Medium |
| Alwan 2010 ² US | Yes | Yes | Yes | Medium |
| Andrade 2009 ⁸⁶ | Unclear; verification of hospital claims with medical charts was only possible in 72% overall; 71% among unexposed and 72% among | Yes | No; matched on age, but data on race, other exposures, meconium aspiration, and NSAID exposure NR; higher rates of diabetes and asthma in exposed group, no control for confounders | Medium |
| Bakker 2010 The Netherlands | Unclear; ICD-9 or 10 codes, but no information about any verification | Yes | Yes | Medium |
| Bakker 2010 ^{4, 5} The Netherlands | Yes | Yes | Yes | Medium |
| Ban 2012 ⁶ | Unclear; use of electronic medical record but no validation | Yes | Yes | Medium |
| Berard 2007 ⁷ | Unclear; ICD-9 codes, no verification | Yes | Yes | Medium |
| Berle 2004 ⁸⁷ | Unclear; mothers rated infants using an invalidated symptom score form | Yes | Unclear; stated that groups did not differ with respect to demographic data, but data not shown and no adjustments | High |
| Bogen 2010 ⁸ (companion to Wisner 2009) | Yes | Yes | Yes | Medium |
| Boucher 2008 ⁹ | Unclear; blinding, assessor characteristics, accuracy of data collection NR | Yes | Yes | Medium |
| Bracken 1981 ⁸⁸ | Yes | Yes | No, unable to adjust for covariates because of small numbers | High |
| Casper 2003 ¹⁰ | Yes | Yes | Unclear; no adjustment for more miscarriages in unmedicated group (54% vs 29%), but matched on numerous other variables | Medium |
| Chambers 1996 ¹¹ US | Unclear (blinding not stated for all outcomes) | Yes | Yes | Medium |
| Chambers 2006 ¹² | Unclear; blinded neonatologist, but pulmonary hypertension documented either by oxygen saturation or echocardiographic evidence and unclear how balanced the methods were between groups | Yes | Yes | Medium |
| Chan-Fai-Chan 2005 ⁸⁹ | Unclear - assessors were not blinded to group allocation | Yes | Unclear | High |
| Canada | | | | |
| Cole 2007 ¹³ | Yes | Yes | Yes | Medium |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating |
|--|---|---|---|--------------------------------|
| Cole 2007 ¹⁴ US | Yes | Yes | Unclear - not all confounders were accounted for | Low |
| Colvin 2010 ⁹⁰ Australia | Unclear (no blinding) | Yes | No (women with Rx may be different) | High |
| Colvin 2011 ⁹¹ Australia | Unclear - included only live born infants | Yes | Yes | Medium |
| Colvin 2012 ¹⁵ Australia | Unclear - included only live born infants | Yes | Yes | Medium |
| Costei 2002 ⁹² Canada | No (self-report, no mention of corroboration, no blinding) | | Yes (increased smokers in exposure group, but modeling accounted for this) | High |
| Croen 2011 ¹⁶ | Yes | Yes | Yes | Medium |
| Davidson 2009 ¹⁷ srael | Unclear (no blinding, SSRI group gets put in incubator; delays in discharge related to this?) | Yes | No (matched for GA only, no controlling) | Medium |
| Davis 2007 ¹⁸ | Yes for limb and eye anomalies and spina bifida for which ICD-9 codes were verified by chart review; unclear for others | Yes | Unclear; collected data on age but baseline comparability NR; race and other exposures data not available; parity not mentioned; control for confounders NR | Medium |
| De Vera 2012 ⁹³ Canada | Yes (although no blinding, tightly defined objective variable with cited validation; no increased visits to increase detection) | Yes | Yes | Low |
| Diav-Citrin 2008 ⁹⁴ | Unclear | Yes | Yes | High |
| Djulus 2006 ⁹⁵ | Unclear | Yes | Yes | High |
| Dubnov-Raz 2012 ²⁰ srael | Unclear (blinding?) | Yes | Yes | Medium |
| Dubnov-Raz, 2012 ¹⁹ srael | Yes for ECG outcomes, but other outcomes = unclear | Yes | No (matched for GA only, control group had audible murmur) | Medium |
| Einarson 2009 ⁹⁶ | Unclear | Yes | Yes | High |
| Einarson 2011 ⁹⁷ Canada | Unclear; blinding NR, details of corroboration NR | Yes | Matched for age, smoking, alcohol use, timing of call, but results of matching NR and information based on self-report without verification | High |
| Einarson, 2003 ⁹⁸ Canada | Unclear (assume self report, no mention of blinding) | Yes | Unclear (matched, but does not appear to be adjusted for increased smokers in one group) | High |
| Einarson, 2009 ⁹⁹ Canada | Unclear; no blinding and based on maternal report. Attempts made to corroborate with treating physician, but no information about corroboration rate. | Unclear; individual anomalies NR for the control group NR | Unclear (matched for age, tob, ETOH, but simple stats) | High |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating |
|---|---|---|---|--------------------------------|
| Einarson, 2010 ¹⁰⁰ Canada | Unclear (asked doctors, but it's not clear how many women gave permission or how many doctors responded) | Yes | Unclear (matched for maternal age, smoking, ETOH only); no group with depression; lack of knowing if ascertainment of the factors matched on was good (self-report) | High |
| El Marroun 2012 ²¹ The Netherlands | Yes | Yes | Yes | Low |
| Ericson 1999 ¹⁰¹ | Unclear | Yes | No | High |
| Ferreira 2007 ²² | Yes | Yes | Yes | Medium |
| Figueroa 2010 ²³ US | Unclear; no validation study of accuracy | Yes | Yes | Medium |
| Gabally 2009 ¹⁰² | Birth outcomes - no; depression - yes; withdrawal symptoms – yes | Yes | Unclear | High |
| Galbally 2011 ¹⁰³ (companion to Galbally 2009) | Birth outcomes - no; depression and child development - yes | Yes | Unclear - control group matched but not stated for what characteristics. | High |
| Gorman 2012 ²⁴ US | Birth outcomes - no (self-report with unclear number confirmed by medical chart); breastfeeding outcomes - yes | Yes | Yes | Medium |
| Grzeskowiak 2012 ²⁵ Australia | Yes | Yes | Yes | Medium |
| Hale 2010 ¹⁰⁴ US | No (self report, no blinding) | Unclear (hard to determine which participants are in reporting) | Yes | High |
| Heikkinen 2002 ²⁶ Finland | Unclear (no mention of blinding) | Yes | No (no adjustment) | Medium |
| Jimenez-Solem 2012 ²⁷ Denmark | Unclear - no validation study described | Yes | Yes | Low |
| Jimenez-Solem, 2013, Denmark ²⁸ | Unclear (methods for verifying the gestational age at death, and also unclear if national records are reliable) | Yes | Yes | Low |
| Jordan 2008 ²⁹ | Unclear - obtained from medical charts where doctor generally knew exposure status | Yes | No | Medium |
| Kallen 2004 ³⁰ | Yes | Yes | Unclear; other than paroxetine they didn't adjust for preterm birth or medical disorders such as diabetes (important for hypoglycemia) | Medium |
| Kallen 2007 ¹⁰⁵ | Unclear - ICD-10 code P293B; no validation cited | Yes | Yes | Medium |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating |
|---|---|---|--|--------------------------------|
| Kallen 2007 ³¹ Sweden | Unclear - some data from 2005 is missing, may be screening women/fetuses with ultrasound more in women who take ADs | Yes | Yes | Medium |
| Kieler 2012 ³³ Sweden | Unclear - no validation of ICD codes | Yes | Yes | Low |
| Kleiger- Grossmann 2011 ¹⁰⁶ | Unclear - assessors were not blinded to group allocation | Yes | Yes | High |
| Canada Klinger 2010 ¹⁰⁷ Israel | Yes | Yes | No, higher maternal age in NAS group and this was not controlled for (34 vs 32) | High |
| Kornum 2010 ³⁴ Denmark | No - 1) included only live born infants; 2) accuracy of coding and diagnosis is questioned on p.34; 3) detection bias x 2 sources | Yes | Yes | Medium |
| Kulin 1998 ¹⁰⁸ | Yes for major malformations; no for others based on self-report alone | Yes | No; more tobacco use in SSRI group and other differences, no control for differences | High |
| Laine 2003 ³⁵ | Unclear - blinding of outcome assessors intended but stated to not be maintained. Not clear what proportion unblinded. | Yes | No | Medium |
| Latendresse, 2011 ³⁶ US | Unclear. No mention of blinding | Yes | Yes | Medium |
| Lennestal 2007 ³⁷ Sweden | Yes | Yes | Yes | Medium |
| Levinson-Castiel 2006 ³⁸ Israel | Unclear, unblinded assessors | Yes | Unclear, similar in age but no other confounders reported and no regression analysis | Medium |
| Lewis 2010 ³⁹ Australia | Unclear | Yes | No | Medium |
| Logsdon 2011 ⁴⁰ US | Yes | Yes | No - only race was controlled for | Medium |
| Louik 2007 ⁴¹ US | Unclear - not clear how they confirmed specific diagnoses | Yes | Yes | High |
| Lund 2009 ⁴² Denmark | Unclear, no mention of blinding | Yes | Yes | Medium |
| Malm 2011 ⁴³ Finland | Yes | Yes | Yes | Low |
| Manakova 2011 ¹⁰⁹ Czech Republic | No. No mention of blinding | Yes | Unclear | High |
| Maschi 2008 ¹¹⁰ Italy | No | Yes | Yes | High |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating |
|---|--|---|--|---|
| McElhatton 1996 ¹¹¹ UK | Yes | Yes | No - no confounders are adjusted for | High |
| McFarland 2011 ⁴⁴ US | Yes | Yes | Unclear - they do not adjust for smoking status, comorbidities or other medications | Medium |
| Merlob 2009 ⁴⁵ Israel | No - cardiologists not blinded to exposure for last 2 years of study | Yes | No - they collected some of them and didn't adjust for them because the sample was too small and there was not matching to the control group | Medium |
| Misri 1991 ¹¹² Canada | Unclear, methods NR | Yes | NA, no between-groups comparison | High |
| Misri 2006 ⁴⁶ Canada | Yes | Yes | Unclear; similar in age, univariately controlled for depression and anxiety | Medium |
| Misri 2010 ⁴⁷ Canada | Unclear | Yes | Unclear, only controlled for age and number of children in home | Medium |
| Mulder 2011 ⁴⁸ The Netherlands | Unclear; blinding NR | Yes | Yes | Medium |
| Nakhai-Pour 2010 ⁴⁹ | Yes | Yes | Yes | Low |
| Canada Nijenhuis 2012 ¹¹³ The Netherlands | Yes | Yes | No, no confounding variables reported or controlled for | High |
| Nordeng 2012 ⁵⁰ Norway | Yes | Yes | Yes | Medium |
| Nulman 1997 ¹¹⁴ Canada | Yes for neurobehavioral in children (blind psychometrician, standardized instruments); unclear and perinatal complications (verified by pediatrician), but unclear for maternal outcomes | Yes | No; differences in gravidity, parity, previous abortions, SES, alcohol use and cigarette smoking not controlled for | High |
| Nulman 2002 ⁸³ | Yes | Yes | Unclear; multiple linear regression adjusted for differences in maternal depression duration, severity, number episodes, but not number of anxiolytic drugs | Medium for Reynell; High for others |
| Nulman 2012 ^{s1} Canada | Yes | Yes | Unclear; no control for higher gravidity (3 vs 2), previous therapeutic abortions (0.6 vs 0.3), light alcohol use (62% vs 55%) and cigarette smoking (45% vs 31%), lower SES in fluoxetine group (40 vs 46), or genetic factors; assessed based on self-report | High |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating | |
|--|--|---|--|--------------------------------|--|
| Oberlander 2002 ⁵² (2-day), Oberlander 2005 ¹¹⁵ (2- month) | Yes | Yes | Unclear; no baseline differences in maternal age or depression, but no other material variables reported. | Medium | |
| Oberlander 2004 ¹¹⁶ Canada | Unclear, partial blinding and respiratory symptoms not assessed in a standardized way, only when concern expressed Yes Unclear; only age reported and was balanced | | High | | |
| Oberlander 2006 ⁵³ | Yes | Yes | Yes | Medium | |
| Oberlander 2007 ¹¹⁷ (4-year followup to Oberlander 2005) | Yes | Yes | Unclear; age was balanced between groups; regression models examined maternal mood, prenatal clonazepam exposure, a history of PNA, and umbilical cord drug levels as predictors of child behavior | | |
| Oberlander 2008 ⁵⁴ | Yes | Yes; perhaps exception of maternal mood | Unclear; no control for higher levels of depression and anxiety in exposed group. | Medium | |
| Oberlander 2008 ⁵⁵ Canada | Unclear - included only live born infants | Yes | Unclear - key confounders not accounted for | Medium | |
| Oberlander 2010 ¹¹⁸ | Unclear; blinding NR | Yes | Unclear; methods for confounding variable ascertainment NR; no adjustment for some baseline differences; non-SSRI exposed group had higher education (18 vs 15 years) and higher rates of 1-10 alcohol drinks (42% vs 24%) | High | |
| Okun 2011 ⁵⁶ JS | Unclear, blinding NR | Yes | No, no information about comparability of baseline characteristics between SSRI-exposed and non-exposed groups and no adjustment for confounders | | |
| Okun 2012 ⁵⁷ JS | Unclear - they did not use objective tests of sleep latency or have sleep info pre-pregnancy | Yes | Unclear - they note because of the small sample size they were unable to control for all variables | Medium | |
| Palmsten 2012 ⁵⁸ Canada | | | | Medium | |
| Pastuszak 1993 ¹¹⁹ | Yes, self-report verified by written documentation by pediatrician | Yes | No; age matched, but higher parity in fluoxetine vs NTC and no control | Yes | |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating |
|---|---|---|---|--------------------------------|
| Pawluski 2009 ¹²⁰ Canada | Unclear; blinding NR | Yes | Unclear; few characteristics reported, but similar at baseline | High |
| Pearlstein 2006 ¹²¹ JS | No blinding | Unclear | Unclear if matched for age, race. Baseline characteristics reported overall and not by group. | High |
| Pearson 2007 ⁵⁹ US | Yes | Yes | Unclear; some differences that were not controlled for: exposed group had lower tobacco use (24% vs 54%) and more married women (97% vs 77%). Also exposed group had higher levels of missing data on tobacco use (40% vs 6%) and marital status (31% vs 10%) | Medium |
| Pedersen 2009 ⁶⁰ Denmark | No. Only includes live-born infants | Yes | Yes | Medium |
| Pedersen 2010 ⁶¹ Denmark | Unclear; self-report, not verification; unblinded assessors | Yes | Unclear; adjusted for multiple factors, but all were measured based on self-report | Medium |
| Rai 2013 ⁶² Sweden | Yes | Yes | Yes | Low |
| Ramos 2008 ⁸⁴ Canada | Unclear; ICD-9 codes, no verification | Yes | Yes | Medium |
| Ramos 2010 ⁶⁴ Canada | Unclear - no data on how reliable database is for this | Yes | Yes; although don't have placental abnormalities or genetic issues which would contribute to both | Medium |
| Rampono 2004 ¹²² Australia | Unclear; blinding NR | Yes | No; comparability of baseline characteristics NR, no analysis | High |
| Rampono 2009 ⁶⁵ Australia | Yes | Yes | Unclear; no adjustment for lower proportion of nulliparous (32% vs 56%) and higher proportion of hypertension (21% vs 6%) and alcohol use (24% vs 11%) in case group. | Medium |
| Reebye 2002 ⁶⁶ British Columbia | Yes | Yes | Unclear; only difference was higher education for control mothers and no adjustment | Medium |
| Reis 2010 ⁶⁷ Sweden | Yes | Yes | Yes | Medium |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating |
|--|---|---|---|----------------------------------|
| Salisbury 2011 ⁶⁸ US | Yes | Yes | Yes | Medium (due to loss to followup) |
| Salkeld 2008 ⁶⁹ Canada | Yes | Yes | Yes | Low |
| Simon 2002 ⁷⁰ US | Unclear - included only live born infants | Yes | Yes | Low |
| Sit 2011 ⁷¹ US | Yes | Yes | Unclear; comparability of baseline characteristics NR between fluoxetine and short half-life agents groups, no adjustment | Medium |
| Sivojelezova 2005 ¹²³ | Unclear | Yes | No | High |
| Stephansson 2013 ⁷² Sweden | Yes | Yes | Yes | Medium |
| Suri 2004 ¹²⁴ | Unclear | Yes | No | High |
| Suri 2007 ⁷³ US | Yes | Yes | Unclear; no significant differences in age or parity, other important confounders NR | Medium |
| Suri 2011 ⁷⁴ US | Yes | Yes | Unclear; no significant differences in age or parity, other important confounders NR | Medium |
| Toh 2009 ¹²⁵ US/Canada | No | Yes | Yes (but confounding by depression could occur) | High |
| Toh 2009 ⁷⁵ US/Canada | No (self report) | Yes | Yes | Medium |
| Ververs 2009 ⁷⁶ The Netherlands | Unclear (methods not described for how data obtained or verified) | Yes | No (no adjustment) | Medium |
| Wen 2006 ⁷⁷ Canada | Unclear. No mention of blinding | Yes | Yes | Medium |
| Wichman 2009 ¹²⁶ US | Unclear (no mention of blinding) | Yes | No (no adjustment) | High |
| Wilson 2011 ⁷⁸ US | Unclear (chart review, no blinding) | Yes | Unclear (matched for GA, confounding by depression) | Medium |
| Wisner 2009 ⁷⁹ /Okun 2012 ⁵⁷ US | Yes | Yes | Yes | Medium |
| Wogelius 2006 ⁸⁰ Danish | Unclear (no blinding) | Unclear (3 most prevalent) | Yes | Medium |

| Author Year Country | 6. Unbiased and accurate event ascertainment? | 7. Free of selective outcome reporting? | 8. Adequate handling of potential confounding variables? | Overall Risk of Bias Rating |
|----------------------------------|---|---|--|--------------------------------|
| Yonkers 2012 ⁸¹ US | Yes | Yes | Yes | Low |
| Zeskind 2004 ⁸² US | Yes | Yes | Yes | Medium |

Note: AD=antidepressant, ETOH=alcohol, GA=gestational age, LMP=last menstrual period, MR=medical record, NA=not applicable, NB=newborn, NR=not reported, NSAID=non steroidal anti inflammatory drug, SES=socio-economic status, SSRI=selective serotonin reuptake inhibitor, TCA=tricyclic antidepressant, UK=United Kingdom, US=United States.

Evidence Table 3. Data Abstraction of Trials

| Author Year Country Risk of Bias Appleby 1997 ¹²⁷ UK Medium | Population Inclusion Criteria: Depressed 6-8 weeks after childbirth. Score ≥ 10 on Edinburgh postnatal depression scale; Score ≥ 12 on the revised clinical interview schedule; satisfied research diagnostic criteria for major or minor depressive disorder. Exclusion Criteria: Inadequate English and living outside district. Chronic (>2 years) or resistant depression, current drug | Interventions 1) Fluoxetine + 1 CBT session 2) Fluoxetine + 6 CBT sessions 3) Placebo + 1 CBT session 4) Placebo + 6 CBT sessions | Age Ethnicity Mean age: 25 Ethnicity NR | Other Population Characteristics Unplanned Pregnancy: 13.75% Major Depressive Disorder: 12.75% History of Postnatal Depression: 7.5% Family History of postnatal | Number Randomized 87 |
|--|---|---|--|--|----------------------------|
| 139 | or alcohol misuse, severe illness requiring close monitoring or hospital admission, and breast feeding. | Fluoxetine dose NR Time Period: 12 weeks | | depression: 4% | |
| Bloch 2012 ¹²⁸ Israel Medium | Age 18-45 years; criteria met during the screen and baseline visits for current major depressive disorder according to the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV), as assessed by the Structured Clinical Interview for DSM-IV Axis I disorders, and onset of the depressive episode starting within 2 months of parturition. | Three Treatment Groups 1) Sertraline + psychotherapy 2) Placebo + psychotherapy Sertraline mean (SD) dose at 4 weeks: 65.0 (23.5)mg, at 8 weeks: 67.5 (24.5)mg Time Period: 8 wks | Mean age: NR Ethnicity: NR | Anxiety Diagnosis: 22.5% Past Depression: 22.5% Depression in Family: 37.5% Pregnancies: 1.4% | 42 |
| Misri, 2004 ¹²⁹ Canada Medium | Age 18-40 years; ≥18 on HAM-D, ≥ 20 on HAM-A and ≥ 12 on EPDS; delivered a healthy baby close to term (37-42 weeks) with a minimum birth weight of 2.5 kg; non smokers; willing to use adequate contraception during the study. | 1. Paroxetine 2. Paroxetine + CBT Paroxetine max. dose: 50 mg Time period: 12 weeks | Mean age: 30 White: 62.9% South Asian: 14.3% First Nations: 8.6% Mexican, Spanish, Indo- Canadian, Italian, South- American: 2.8% each | % of children previously born 1: 57% 2: 28.6% 3: 11.4% 4: 2.9% DSM diagnosis Depression only: 2.9% Depression + anxiety: 34.3% Depression: 31.4% Depression+ anxiety + OCD: 31.4% | 35 |

| Author Year Country Risk of Bias | Population | Interventions | Age Ethnicity | Other Population Characteristics | Number Randomized |
|---|--|---|--------------------------------------|-------------------------------------|----------------------|
| Morrell 2009 ¹³⁰ | Inclusion Criteria: At-risk women (who returned a 6-week | Primary comparison was | Mean age: | 93.7% living with others, 6.3% | 101 clusters |
| UK | EPDS score ≥ 12 on the postal questionnaire), had an 8-week | between at-risk women | 30.9 (SD 5.4) | living alone | in 29 primary |
| Medium | EPDS score ≥ 12 when the EPDS was repeated face-to-face by the HV at 8 weeks postnatally. Women eligible for the intervention were therefore defined by two EPDS score ≥ 12. The HV was allowed to provide the intervention to those women whom the HV felt might benefit from the intervention, irrespective of their EPDS score. Women were recruited if they were registered with participating GP practices, became 36 weeks pregnant during the recruitment phase of the trial, had a live baby and were on a collaborating health visitor's caseload for 4 months postnatally. | randomized to Health Visitor training and women in practices randomized to provide Health Visitor usual care. Six Treatment Groups 1) Cognitive behavioral approach face-to-face 2) Cognitive behavioral approach postal 3) Person-centered approach face-to-face 4) Person-centered approach postal 5) Control (Health Visitor usual care) | Ethnicity: 93.3% White British | 47.1% first baby | care trusts. 595 |

| Author Year Country Trial Name (Quality rating- | | | |
|---|--|-------|-----------|
| optional) | Efficacy/effectiveness outcomes | Harms | Funding |
| Appleby 1997 ¹²⁷ UK Medium | Revised Clinical Interview Schedule Score (Completer Analysis, N=61) % difference in geometric mean scores (95% CI): Fluoxetine vs placebo: 4 weeks=37.1% (5.7% to 58.0%), 12 weeks=40.7% (10.9% to 60.6%); 6 CBT sessions vs 1 CBT session: 4 weeks=53.9% (2.3% to 131.2%), 12 weeks=38.7% (-9.2% to 111.7%) Change in geometric mean scores from baseline to 4 weeks/12 weeks (ITT): Revised Clinical Interview Schedule Fluoxetine+1 CBT session= -16.3/-22.7 Fluoxetine+6 CBT sessions= -16.9/-16.3 Placebo+1 CBT session= -10.4/-10.2 Placebo+6 CBT sessions= -13.7/-14.2 Edinburgh postnatal depression scale Fluoxetine+6 CBT session= -9.7/-10.2 Placebo+1 CBT session= -9.7/-10.2 Placebo+1 CBT session= -8.1/-7.2 Placebo+6 CBT sessions= -6.6/6.9 | NR | T ununing |
| | Hamilton score Fluoxetine+1 CBT session= NR/-10 Fluoxetine+6 CBT sessions= NR/-8.9 Placebo+1 CBT session= NR/-5.9 Placebo+6 CBT sessions= NR/-8.9 | | |

| Author | T | T | T |
|-------------------------------------|---|--|----------------------------------|
| | | | |
| Year | | | |
| Country | | | |
| Trial Name | | | |
| (Quality rating- | Efficacy/offsetiveness syteemes | Harma | Eundina |
| optional) Bloch 2012 ¹²⁸ | Efficacy/effectiveness outcomes Sertraline + psychotherapy vs placebo + psychotherapy | Harms Hypomaniac switch in 10% of patients in sertraline | Funding Independent investigator |
| Israel | Sertiallile + psychotherapy vs placebo + psychotherapy | +psychotherapy group vs 0 in placebo | award for National Alliance on |
| Medium | Change from baseline at 8 weeks, n=40 (p-values are NS | +psychotherapy group vs o in placebo | Research on Schizophrenia |
| Medium | presented as group by time interaction unless otherwise specified | | and Depression |
| | for MADRS, EPDS, CGI) | | and Depression |
| | Improvement in MADRS -13.86 vs -9.85, significant time effect | | |
| | p<0.0001 | | |
| | Improvement in EPDS: -9.75 vs -3.55, significant time effect | | |
| | p<0.0001 | | |
| | Improvement in CGI-S: -1.9 vs -1.5 | | |
| | Improvement in CGI-I: -2.00 vs -0.25 | | |
| | | | |
| | Response rates at 8 weeks | | |
| | MADRS or EPDS, n=40: 70% vs 55%, p=NS | | |
| | Remission rates at 8 weeks | | |
| | MADRS or EPDS, n=40, 65% vs 50%, p=NS | | |
| Misri, 2004 ¹²⁸ | Paroxetine vs Paroxetine +CBT | NR | Glaxo-SmithKline Canada |
| Canada | Change from baseline (reduction) at final visit (P<0.01 for all) | | |
| Medium | HAM-D: 17.6 vs 15.2 | | |
| | HAM-A: 14.3 vs 14.6 | | |
| | EPDS: 8.4 vs 10.2 | | |
| | YBOCS: 4.9 vs 9.1 | | |
| | CGI-I: 2.75 vs 2.59 | | |
| | 0/ nationts with raduation in symptom accross at final visit | | |
| | % patients with reduction in symptom scores at final visit ≥50% score (p=NS between groups) | | |
| | HAM-D: 87.5 vs 78.9 | | |
| | HAM-A: 75.0 vs 84.2 | | |
| | EPDS: 61.5 vs 58.3 | | |
| | ≥60% score reduction in symptom scores at final visit (p=NS | | |
| | between groups) | | |
| | YBOCS: 80.0 vs 78.6 | | |
| | CGI (1=normal, not at all ill) (p=NS between groups) | | |
| | Depression (based on HAM_D): 75 vs 63.2 | | |
| | Anxiety (based on HAM-A): 75 vs 57.9 | | |
| | Obsessions and/or OCD (based on YBOCS): 80 vs 71.4 | | |

| Author Year Country Trial Name | | | |
|---|---|-------|---------------------|
| (Quality rating- | Efficacy/effectiveness outcomes | Harms | Funding |
| optional) Morrell 2009 ¹³⁰ UK Medium | Intervention vs control Proportion of at-risk women with a 6-month Edinburgh Postnatal Depression Scale score >=12 (Primary Outcome) 33.9% vs 45.6% OR, unadjusted: 0.62 (95% CI 0.40, 0.97); P=0.036 OR, adjusted for 6-week EPDS score: 0.64 (95% CI 0.40, 1.01); P=0.058 OR, adjusted for 6-week EPDS score, lives alone, history of postnatal depression, any life events: 0.60 (95% CI 0.38, 0.95); P=0.028 OR, adjusted for lives alone, history of postnatal depression, any life events: 0.57 (95% CI 0.36, 0.90); P=0.017 6-month outcomes: control vs intervention, adjusted mean difference in scores (95% CI) EPDS: -2.1 (-3.3, -0.9), P=0.001 SF-12 PCS: -1.7 (-3.6, 0.1), P=0.069 SF-12 MCS: 5.2 (2.5, 7.8), P=0.001 SF-6D: 0.03 (0.00, 0.06), P=0.025 CORE-OM well-being: -0.3 (-0.5, -0.2), P=0.001 CORE-OM risk: -0.0 (-0.1, 0.0), P=0.149 CORE-OM symptoms: -0.2 (-0.4, -0.1), P=0.005 CORE-OM functioning: -0.3 (-0.4, -0.1), P=0.001 State anxiety: -3.9 (-6.6, -1.3), P=0.003 | NR | Government (UK NHS) |
| | Trait anxiety: -3.7 (-6.1, -1.4), P=0.002 PSI parenting distress: 3.5 (1.3, 5.8), P=0.002 PSI PCDI: 2.1 (0.7, 3.5), P=0.003 PSI difficult child: 2.9 (1.7, 4.2), P=0.001 PSI total stress: 9.3 (137.3, 13.4), P=0.001 | | |

Note: CBT=cognitive behavioral therapy, CI=confidence interval, CGI-I=Clinical Global Impression scale - Improvement, CGI-S=Clinical Global Impression Scale - Severity, CORE-OM= Clinical Outcomes in Routine Evaluation, DSM-IV=Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, HAM-A=Hamilton Anxiety Rating Scale, HAM-D=Hamilton Depression Rating Scale, ITT=intention to treat, MADRS= Montgomery-Asberg Depression Rating Scale, NR=not reported, OCD=obsessive compulsive disorder, OR=odds ratio, PCDI=Parent Child Dysfunctional Interaction, PSI=Parenting Stress Index, SD=standard deviation, UK=United Kingdom, US=United States.

Evidence Table 4. Risk of Bias Assessment of Trials

| Author Year Country | Randomization Adequate? | Allocation Concealment Adequate? | Groups Similar at Baseline? | Eligibility Criteria Specified? | Outcome Assessors Masked? | Care Provider Masked? |
|-------------------------------------|----------------------------|---|---|------------------------------------|---|------------------------------|
| Appleby 1997 ¹²⁷ UK | Yes | Unclear | Placebo+1 session counseling younger | yes | Yes to Drug/No to counseling | Yes to Drug/No to counseling |
| Bloch 2012 ¹²⁸ Israel | Yes | Unclear | Yes | Yes | Yes | Yes |
| Misri 2004 ¹²⁹ Canada | Yes | Unclear (no details given) | Yes | Yes | Unclear (Yes at baseline, then for followup: "patient's progress was evaluated by the psychiatrist investigator who administered) | NA |
| Morrell 2009 ¹³⁰ UK | Yes | Yes | Yes | Yes | Blinding not possible | Blinding not possible |
| Sharp 2010 ¹³¹ UK | Yes | Yes | Yes | Yes | No | No |
| Wisner 2006 ¹³² US | Yes | Unclear - it says randomized by a sequence generated by SPSS but it is unclear if people can see the whole list and so would know what the next assignment would be. If they knew the next assignment it would potentially introduce bias because they could change the order they enrolled a patient to get them into the group. | No - more non-white women were assigned to the sertraline group and no other baseline variables reported. | Yes | Yes | Unclear |
| Yonkers 2012 ⁸¹ US | Yes | Unclear | Yes, mostly except IDS- SR score different between 2 groups, p<0.05 | Yes | Yes | Yes |

| Author Year Country | Patient masked? | Intention-to-treat analysis | Maintenance of comparable groups | Acceptable levels of crossovers, adherence, and contamination? | Acceptable levels of overall attrition and between-group differences in attrition? | Overall Risk of Bias Rating |
|--------------------------------------|-----------------------|--|----------------------------------|--|---|--------------------------------|
| Appleby 1997 ¹²⁷ UK | Yes except counseling | Yes | Yes | Unclear | Overall attrition 30%, acceptable between group differences in attrition | Medium |
| Bloch 2012 ¹²⁸ Israel | Yes | Yes | Yes | Yes for adherence and crossover, unclear for contamination | Yes | Medium |
| Misri 2004 ¹²⁹ Canada | No | Yes for all but EPDS | Yes | Unclear for all | Yes | Medium |
| Morrell 2009 ¹³⁰ UK | Blinding not possible | No, 418/595 included in primary statistical analysis. No imputation of missing data. | Yes | Unclear | Yes | Medium |
| Sharp 2010 ¹³¹ UK | No | No, At 18 weeks 206/254 included in analysis (19% excluded) | Unclear | Adherence-No, Contamination: No, Crossover: unclear | At 18 weeks, overall attrition acceptable, between group differences: No>10% | High |
| Wisner 2006 ¹³² US | Yes | Yes for primary, no for secondary | NA, not comparable at baseline | Unclear for all | No - there was 42% attrition in the sertraline group and 24% percent attrition in the nortriptyline group at 8 weeks. This is both high overall and differential attrition. | High |
| Yonkers 2012 ⁸¹ US | Yes | No, 44.3% included in the analysis | Yes | High non adherence: 37% (12 in treatment group, 14 in Placebo), Other: unclear | Overall attrition 56%, acceptable between group differences in attrition | High |

Note: NA=not applicable, UK=United Kingdom, US=United States.

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